

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

FORM APPROVED  
OMB No. 1004-0136  
Expires November 30, 2000

5. Lease Serial No.  
UTU-25787

6. If Indian, Allottee or Tribe Name

7. If Unit or CA Agreement, Name and No.

NATURAL BUTTES UNIT

8. Lease Name and Well No.

NBU 1022-10J

9. API Well No.

43-047-37168

10. Field and Pool, or Exploratory

NATURAL BUTTES

11. Sec., T., R., M., or Blk, and Survey or Area

SEC 10-T10S-R22E

12. County or Parish

UINTAH

13. State

UT

1a. Type of Work: ☒ DRILL

☐ REENTER

b. Type of Well: ☐ Oil Well ☒ Gas Well ☐ Other

☐ Single Zone ☒ Multiple Zone

2. Name of Operator

WESTPORT OIL & GAS COMPANY, L.P.

3A. Address

1368 SOUTH 1200 EAST, VERNAL, UTAH 84078

3b. Phone No. (include area code)

(435) 781-7060

4. Location of Well (Report location clearly and in accordance with any State requirements. \*)

At surface NWSE 2136' FSL 2620' FEL 634500X 39.962015  
At proposed prod. Zone 4424519Y -109.425259

14. Distance in miles and direction from nearest town or post office\*

24.65 MILES SOUTHEAST OF OURAY, UTAH

15. Distance from proposed\*

location to nearest  
property or lease line, ft.  
(Also to nearest drig. unit line, if any)

2136'

16. No. of Acres in lease

600

17. Spacing Unit dedicated to this well

40

18. Distance from proposed location\*  
to nearest well, drilling, completed,  
applied for, on this lease, ft.

REFER TO  
TOPO C

19. Proposed Depth

8600'

20. BLM/BIA Bond No. on file

CO-1203

21. Elevations (Show whether DF, KDB, RT, GL, etc.)

5069.9' GL

22. Approximate date work will start\*

UPON APPROVAL

23. Estimated duration

TO BE DETERMINED

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

1. Well plat certified by a registered surveyor.

2. A Drilling Plan.


3. A Surface Use Plan (if the location is on National Forest System Lands, the  
SUPO shall be filed with the appropriate Forest Service Office.

4. Bond to cover the operations unless covered by an existing bond on file (see  
Item 20 above).

5. Operator certification.

6. Such other site specific information and/or plans as may be required by the  
authorized office.

25. Signature



Name (Printed/Typed)

DEBRA DOMENICI

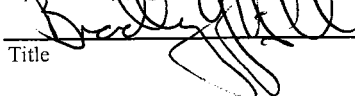
Date

9/19/2005

Title

ASSOCIATE ENVIRONMENTAL ANALYST

Approved by (Signature)



Name (Printed/Typed)

BRADLEY G. HILL

Date

09-27-05

Title

ENVIRONMENTAL SCIENTIST III

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

\*(Instructions on reverse)

Federal Approval of this  
Action is Necessary

RECEIVED

SEP 26 2005

DIV. OF OIL, GAS & MINING

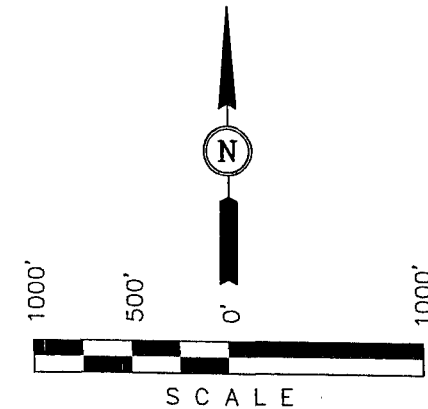
T10S, R22E, S.L.B.&M.

WESTPORT OIL AND GAS COMPANY, L.P.

Well location, NBU #1022-10J, located as shown in the NW 1/4 SE 1/4 of Section 10, T10S, R22E, S.L.B.&M. Uintah County, Utah.

### BASIS OF ELEVATION

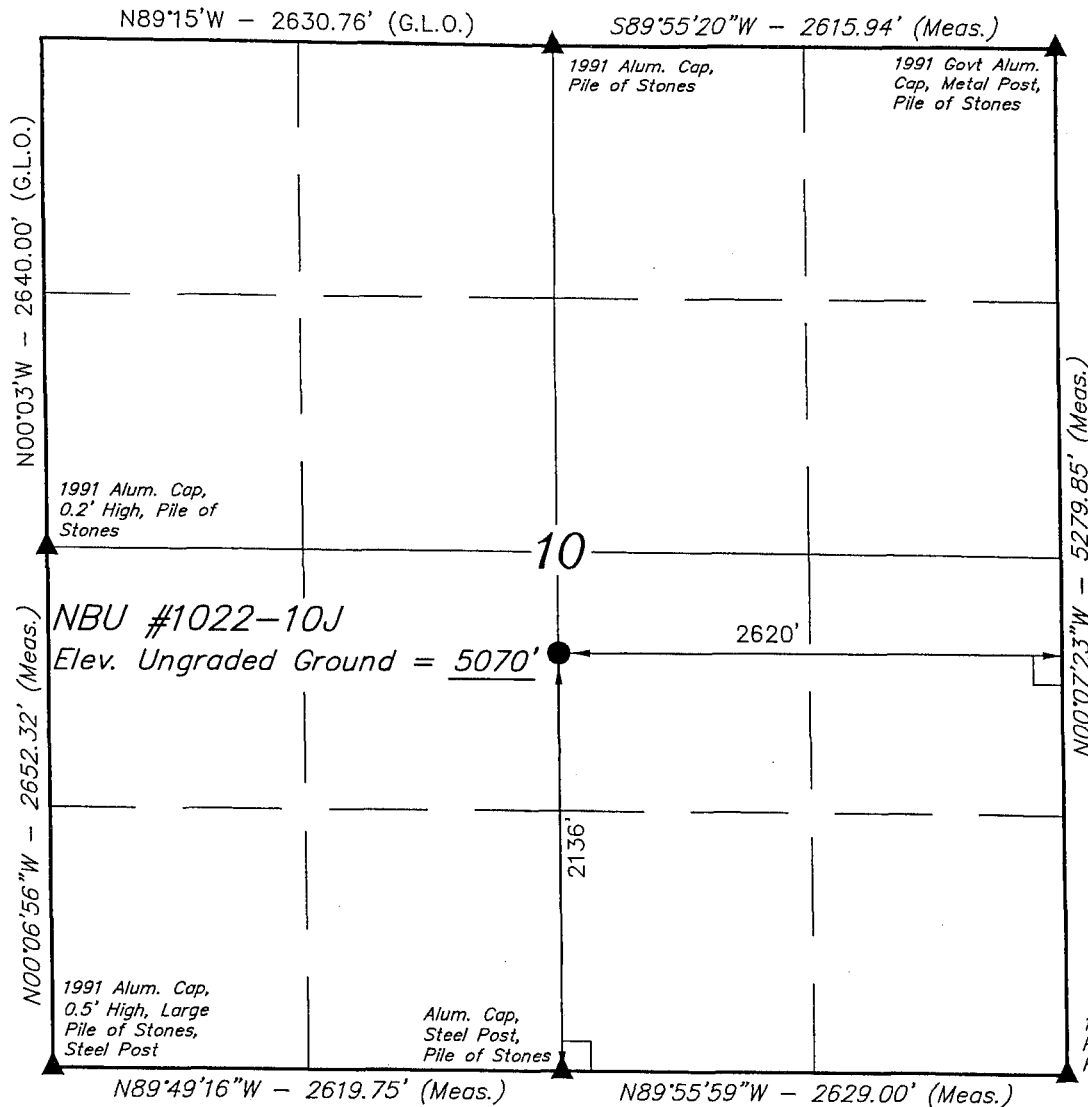
TWO WATER TRIANGULATION STATION LOCATED IN THE NW 1/4 OF SECTION 1, T10S, R21E, S.L.B.&M. TAKEN FROM THE BIG PACK MTN NE QUADRANGLE, UTAH, UTAH COUNTY, 7.5 MINUTE SERIES (TOPOGRAPHICAL MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 5238 FEET.



### CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

*Robert H. Hay*  
 REGISTERED LAND SURVEYOR  
 REGISTRATION NO. 161319  
 STATE OF UTAH



### BASIS OF BEARINGS

BASIS OF BEARINGS IS A G.P.S. OBSERVATION.

(NAD 83)

LATITUDE = 39°57'43.53" (39.962092)

LONGITUDE = 109°25'33.55" (109.425986)

(NAD 27)

LATITUDE = 39°57'43.65" (39.962125)

LONGITUDE = 109°25'31.09" (109.425303)

### LEGEND:

└─┘ = 90° SYMBOL

● = PROPOSED WELL HEAD.

▲ = SECTION CORNERS LOCATED.

UINTAH ENGINEERING & LAND SURVEYING

85 SOUTH 200 EAST - VERNAL, UTAH 84078

(435) 789-1017

SCALE 1" = 1000'	DATE SURVEYED: 6-28-05	DATE DRAWN: 6-29-05
PARTY J.F. P.J. K.G.	REFERENCES G.L.O. PLAT	
WEATHER WARM	FILE WESTPORT OIL AND GAS COMPANY, L.P.	

NBU 1022-10J  
NWSE SEC 10-T10S-R22E  
UINTAH COUNTY, UTAH  
UTU-25787

ONSHORE ORDER NO. 1

***DRILLING PROGRAM***

1. **Estimated Tops of Important Geologic Markers:**

<u>Formation</u>	<u>Depth</u>
Uinta	0- Surface
Green River	1105'
Wasatch	4150'
Mesaverde	6570'
TD	8600'

2. **Estimated Depths of Anticipated Water, Oil, Gas, or Mineral Formations:**

<u>Substance</u>	<u>Formation</u>	<u>Depth</u>
	Green River	1105'
Gas	Wasatch	4150'
Gas	Mesaverde	6570'
Water	N/A	
Other Minerals	N/A	

3. **Pressure Control Equipment** (Schematic Attached)

*Please see the Natural Buttes Unit Standard Operating Procedure (SOP).*

4. **Proposed Casing & Cementing Program:**

*Please see the Natural Buttes Unit SOP.*

5. **Drilling Fluids Program:**

*Please see the Natural Buttes Unit SOP.*

6. **Evaluation Program:**

*Please see the Natural Buttes Unit SOP.*

7. **Abnormal Conditions:**

Maximum anticipated bottomhole pressure calculated at 8600' TD, approximately equals 3440 psi (calculated at 0.4 psi/foot).

Maximum anticipated surface pressure equals approximately 1548 psi (bottomhole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot).

8. **Anticipated Starting Dates:**

*Drilling is planned to commence immediately upon approval of this application.*

9. **Variances:**

*Please see Natural Buttes Unit SOP.*

10. **Other Information:**

*Please see Natural Buttes Unit SOP.*



  
**Westport Oil and Gas Company, L.P.**  
DRILLING PROGRAM

CASING PROGRAM

						DESIGN FACTORS		
	SIZE	INTERVAL	WT.	GR.	CPLG.	BURST	COLLAPSE	TENSION
CONDUCTOR	14"	0-40'				2270	1370	254000
SURFACE	9-5/8"	0 to 2000	32.30	H-40	STC	0.70*****	1.58	4.49
PRODUCTION	4-1/2"	0 to 8600	11.60	M-80 or I-80	LTC	2.39	1.23	201000

- 1) Max Anticipated Surf. Press.(MASP) (Surface Casing) = (Pore Pressure at next csg point-(0.22 psi/ft-partial evac gradient x TVD of next csg point)  
 2) MASP (Prod Casing) = Pore Pressure at TD - (.22 psi/ft-partial evac gradient x TD)  
 (Burst Assumptions: TD = 11.5 ppg) .22 psi/ft = gradient for partially evac wellbore  
 (Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing\*Buoy.Fact. of water)  
 MASP 3251 psi

\*\*\*\*\* Burst SF is low but csg is much stronger than formation at 2000'. EMW @ 2000' for 2270# is 21.8 ppg or 1.13 psi/ft

CEMENT PROGRAM

		FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT	YIELD
SURFACE Option 1	LEAD	500	Premium cmt + 2% CaCl + .25 pps flocele	215	60%	15.60	1.18
	TOP OUT CMT (1)	200	20 gals sodium silicate + Premium cmt + 2% CaCl + .25 pps flocele	50		15.60	1.18
	TOP OUT CMT (2)	as required	Premium cmt + 2% CaCl	as req.		15.60	1.18
SURFACE Option 2		<b>NOTE: If well will circulate water to surface, option 2 will be utilized</b>					
	LEAD	1500	Prem cmt + 16% Gel + 10 pps gilsonite + .25 pps Flocele + 3% salt BWOC	170	35%	11.00	3.82
	TAIL	500	Premium cmt + 2% CaCl + .25 pps flocele	180	35%	15.60	1.18
	TOP OUT CMT	as required	Premium cmt + 2% CaCl	as req.		15.60	1.18
PRODUCTION	LEAD	3,650'	Premium Lite II + 3% KCl + 0.25 pps celloflake + 5 pps gilsonite + 10% gel + 0.5% extender	380	60%	11.00	3.38
	TAIL	4,950'	50/50 Poz/G + 10% salt + 2% gel	1390	60%	14.30	1.31

\*Substitute caliper hole volume plus 0% excess for LEAD if accurate caliper is obtained

\*Substitute caliper hole volume plus 15% excess for TAIL if accurate caliper is obtained

FLOAT EQUIPMENT & CENTRALIZERS

SURFACE	Guide shoe, 1 jt, insert float. Centralize first 3 joints with bow spring centralizers. Thread lock guide shoe.
PRODUCTION	Float shoe, 1 jt, float collar. Centralize first 3 joints & every third joint to top of tail cement with bow spring centralizers.

ADDITIONAL INFORMATION

Test casing head to 750 psi after installing. Test surface casing to 1,500 psi prior to drilling out.

BOPE: 11" 5M with one annular and 2 rams. Test to 5,000 psi (annular to 2,500 psi) prior to drilling out. Record on chart recorder & tour sheet. Function test rams on each trip. Maintain safety valve & inside BOP on rig floor at all times. Kelly to be equipped with upper & lower kelly valves.

Drop Totco surveys every 2000'. Maximum allowable hole angle is 5 degrees.

DRILLING ENGINEER:

Brad Laney

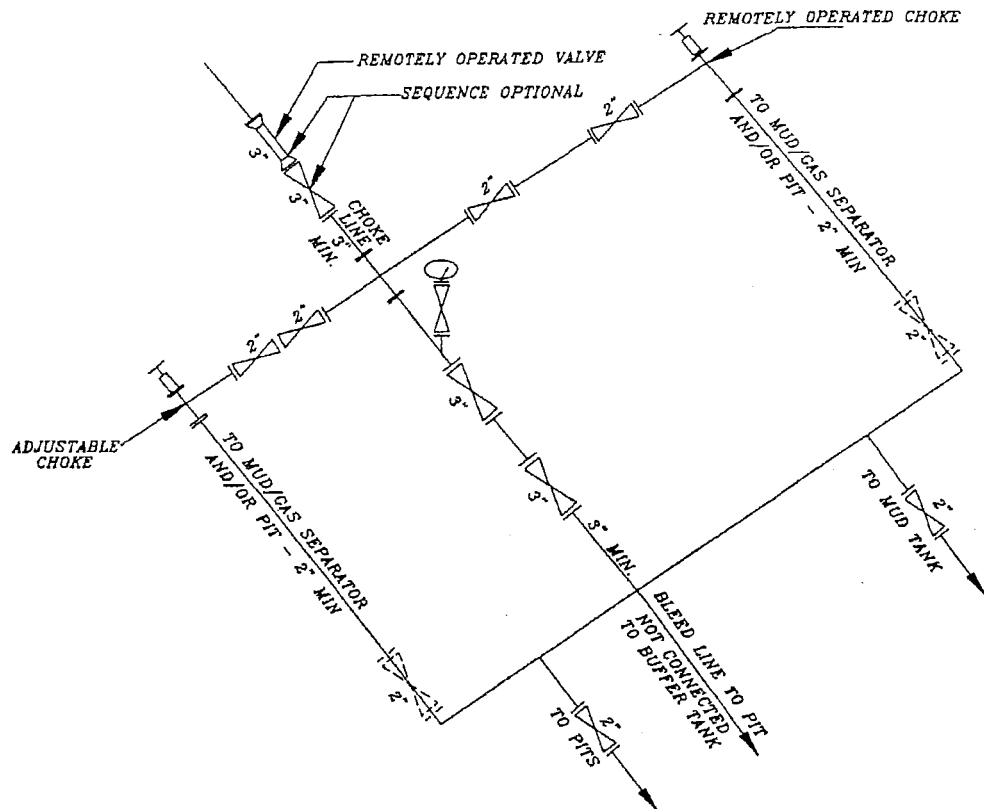
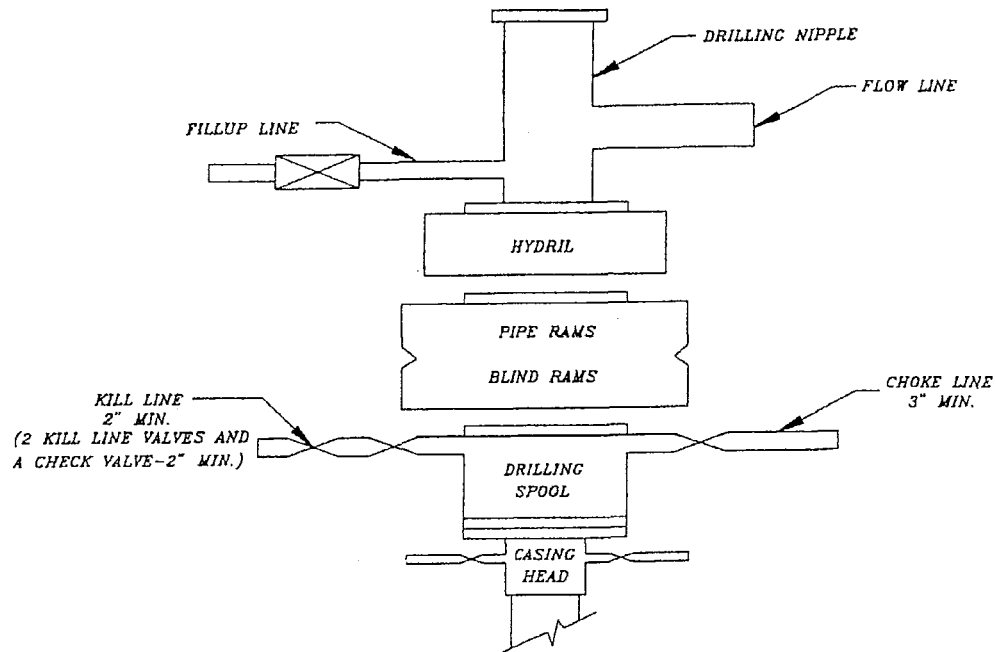
DATE:

DRILLING SUPERINTENDENT:

Randy Bayne

DATE:

# 5M BOP STACK and CHOKE MANIFOLD SYSTEM



**NBU 1022-10J  
NWSE SEC 10-T10S-R22E  
UINTAH COUNTY, UTAH  
UTU-25787**

**ONSHORE ORDER NO. 1**

***MULTI-POINT SURFACE USE & OPERATIONS PLAN***

An onsite inspection was conducted for the NBU 1022-10J on 8/23/05, for the subject well.

**1. Existing Roads:**

Refer to the attached location directions.

Refer to Topo Maps A and B for location of access roads within a 2-mile radius.

**2. Planned Access Roads:**

*Please see the Natural Buttes Unit Standard Operating Procedure (SOP).*

Approximately 440' of new access road is proposed. Refer to Topo Map B.

**3. Location of Existing Wells Within a 1-Mile Radius**

Please refer to Topo Map C.

**4. Location of Existing & Proposed Facilities**

*Please see the Natural Buttes Unit SOP.*

Approximately 500' of pipeline is proposed. Refer to Topo Map D for the location of the proposed pipelines.

**Variances to Best Management Practices (BMPs) Requested:**

Approximately 500' of 4" steel pipeline will be installed on surface within the access corridor for the well location. As a Best Management Practice (BMP), the pipeline would be buried within the access road corridor if possible. The construction of pipelines requires the corridor of 30 feet.

This exception to the BMP should be granted by the BLM Authorized Officer because indurated bedrock, such as sandstone, is at or within 2 feet of the surface and the soil has a poor history for successful rehabilitation.

All facilities will be painted within six months of installation. Facilities required to comply with the Occupational Safety and Health Act (OSHA) will be excluded. The requested color is Carlsbad Canyon Brown (2.5Y 6/2), a non-reflective earthtone.

**5. Location and Type of Water Supply:**

*Please see the Natural Buttes SOP.*

6. **Source of Construction Materials**

*Please see the Natural Buttes SOP.*

7. **Methods of Handling Waste Materials**

*Please see the Natural Buttes SOP.*

Any produced water from the proposed well will be contained in a water tank and will then be hauled by truck to one of the pre-approved disposal sites: RNI, Sec. 5, T9S, R22E, NBU #159, Sec. 35, T9S R21E, Ace Oilfield, Sec. 2, T6S, R20E, MC&MC, Sec. 12, T6S, R19E (*Request is in lieu of filing Form 3160-5, after initial production*).

8. **Ancillary Facilities**

*Please see the Natural Buttes SOP.*

9. **Well Site Layout:** (See Location Layout Diagram)

The attached Location Layout Diagram describes drill pad cross-sections, cuts and fills, and locations of the mud tanks, reserve pit, flare pit, pipe racks, trailer parking, spoil dirt stockpile(s), and surface material stockpile(s).

Please see the attached diagram to describe rig orientation, parking areas, and access roads.

As per previous onsite discussion, a 20 mil reserve pit liner with felt will be used.

Location size may change prior to the drilling of the well due to the current rig availability. If the proposed location is not large enough to accommodate the drilling rig. The location will be re-surveyed and a form 3160-5 will be submitted.

10. **Plans for Reclamation of the Surface:**

*Please see the Natural Buttes SOP.*

When the pit is backfilled, the topsoil pile shall be spread on the location up to the rig anchor points. The location will be reshaped to the original contour to the extent possible. The following seed mixture will be used to reclaim the surface for interim reclamation using appropriate reclamation methods. A total of 12 lbs/acre will be used if the seeds are drilled (24 lbs/acre if the seeds are broadcast). The per acre requirements for *drilled* seed are:

Crested Wheat Grass	12 lbs.
---------------------	---------

Operator shall call the BLM for the seed mixture when final reclamation occurs.

**11. Surface Ownership:**

The well pad and access road are located on lands owned by:

United States of America  
Bureau of Land Management  
170 South 500 East  
Vernal, UT 84078  
(435)781-4400

**12. Stipulations:****Golden Eagle-**

No construction or drilling will occur February 1<sup>st</sup> to July 15<sup>th</sup>.

**Cactus-**

A cactus survey will be conducted.

**13. Other Information:**

A Class III archaeological survey and a paleontological survey have been performed and will be filed when received.

This location is not within 460' from the boundary of the Natural Buttes Unit, nor is it within 460' of any non-committed tract lying within the boundaries of the Unit.

**13. Lessee's or Operator's Representative & Certification:**

Debra Domenici  
Associate Environmental Analyst  
Westport O&G Co.  
1368 South 1200 East  
Vernal, UT 84078  
(435) 781-7060

Randy Bayne  
Drilling Manager  
Westport O&G Co.  
1368 South 1200 East  
Vernal, UT 84078  
(435) 781-7018

Certification: All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, Onshore Oil and Gas Orders, the approved Plan of Operations, and any applicable Notice to Lessees.

Westport O&G Co. is considered to be the operator of the subject well. Westport O&G Co. agrees to be responsible under the terms and conditions of the lease for the operations conducted upon leased lands.

The Operator will be fully responsible for the actions of its subcontractors. A complete copy of the approved "Application for Permit to Drill" will be furnished to the field representative(s) to ensure compliance and shall be on location during all construction and drilling operations.

Bond coverage pursuant to 43 CFR 3104 for lease activities is being provided by BLM Nationwide Bond #CO-1203.

I hereby certify that I, or persons under my supervision, have inspected the proposed drill site and access route, that I am familiar with the conditions that currently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and the work associated with the operations proposed herein will be performed by the Operator, its contractors, and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

  
Debra Domenici

9/19/2005

Date

WESTPORT OIL AND GAS COMPANY, L.P.  
NBU #1022-10J  
SECTION 10, T10S, R22E, S.L.B.&M.

PROCEED IN A WESTERLY DIRECTION FROM VERNAL, UTAH ALONG U.S. HIGHWAY 40 APPROXIMATELY 14.0 MILES TO THE JUNCTION OF STATE HIGHWAY 88; EXIT LEFT AND PROCEED IN A SOUTHERLY DIRECTION APPROXIMATELY 17.0 MILES TO OURAY, UTAH; PROCEED IN A SOUTHERLY, THEN SOUTHEASTERLY DIRECTION APPROXIMATELY 11.2 MILES ON THE SEEP RIDGE ROAD TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE EAST; TURN LEFT AND PROCEED IN AN EASTERLY, THEN SOUTHEASTERLY DIRECTION APPROXIMATELY 8.9 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE NORTHEAST; TURN LEFT AND PROCEED IN A NORTHEASTERLY DIRECTION APPROXIMATELY 2.7 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE EAST; TURN RIGHT AND PROCEED IN AN EASTERLY DIRECTION APPROXIMATELY 0.5 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE NORTHEAST; TURN LEFT AND PROCEED IN A NORTHEASTERLY, THEN SOUTHEASTERLY DIRECTION APPROXIMATELY 1.0 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTHEAST; TURN LEFT AND PROCEED IN A SOUTHEASTERLY, THEN NORTHEASTERLY DIRECTION APPROXIMATELY 0.35 MILES TO THE #10 AND THE BEGINNING OF THE PROPOSED ACCESS TO THE NORTHEAST; FOLLOW ROAD FLAGS IN A NORTHEASTERLY DIRECTION APPROXIMATELY 440' TO THE PROPOSED LOCATION.

TOTAL DISTANCE FROM VERNAL, UTAH TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 55.65 MILES.

# WESTPORT OIL AND GAS COMPANY, L.P.

NBU #1022-10J

LOCATED IN UINTAH COUNTY, UTAH

SECTION 10, T10S, R22E, S.L.B.&M.

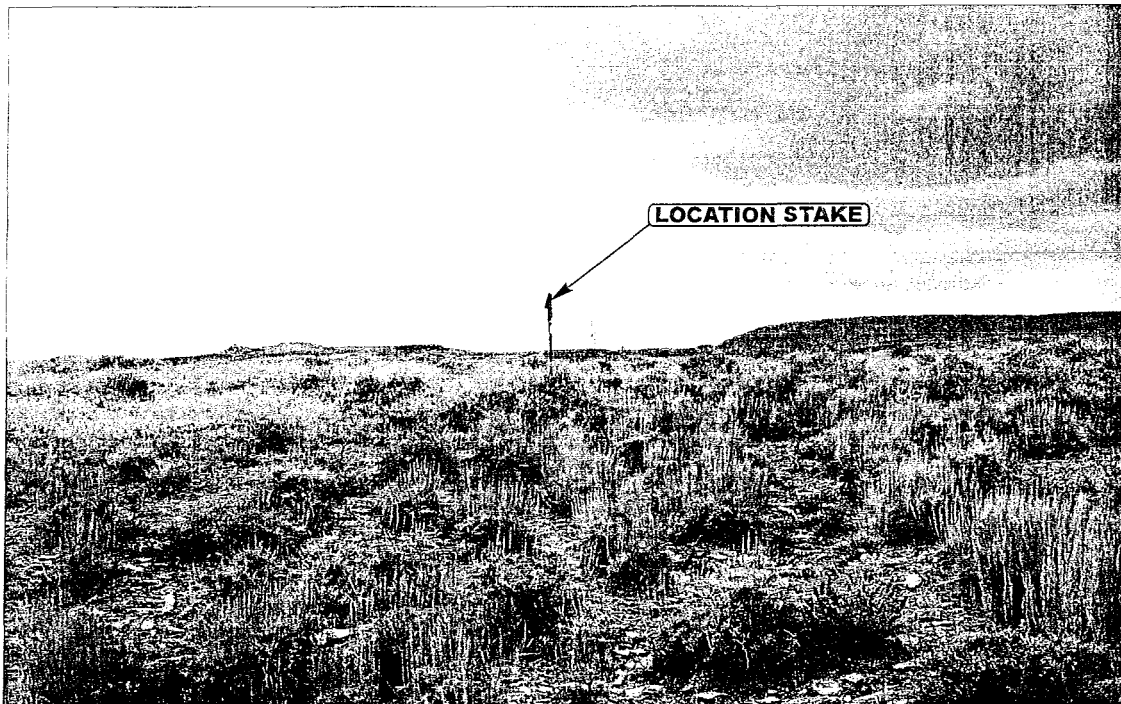


PHOTO: VIEW FROM CORNER #5 TO LOCATION STAKE

CAMERA ANGLE: SOUTHERLY



PHOTO: VIEW FROM BEGINNING OF PROPOSED ACCESS

CAMERA ANGLE: EASTERLY



- Since 1964 -

**E&LS**

Uintah Engineering & Land Surveying

85 South 200 East Vernal, Utah 84078

435-789-1017 uels@uelsinc.com

LOCATION PHOTOS

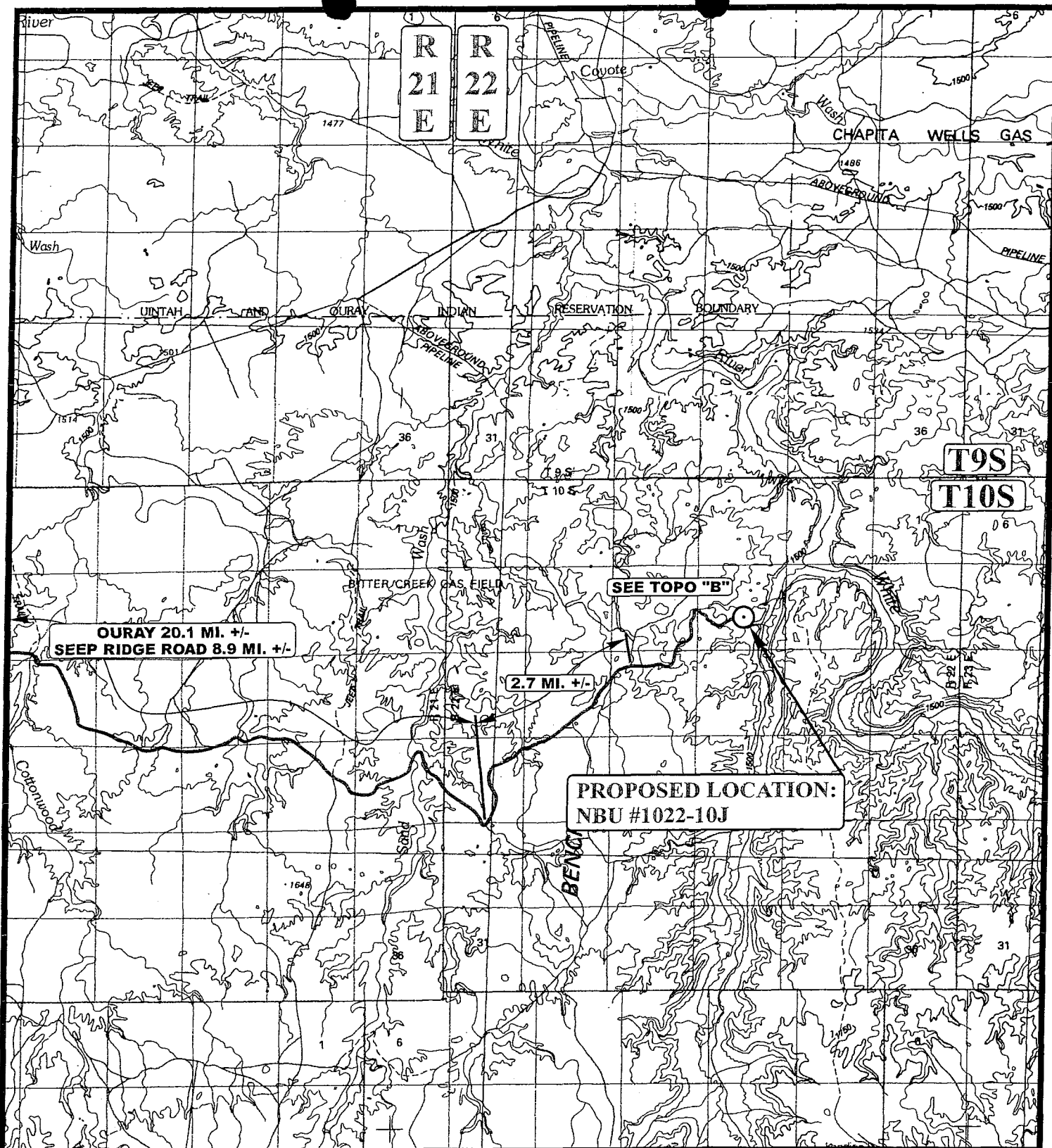
06 30 05  
MONTH DAY YEAR

PHOTO

TAKEN BY: J.F.

DRAWN BY: C.P.

REVISED: 00-00-00



# **LEGEND:**

○ PROPOSED LOCATION



**WESTPORT OIL AND GAS COMPANY, L.P.**

NBU #1022-10J

SECTION 10, T10S, R22E, S.L.B.&M.

2136' FSL 2620' FEL



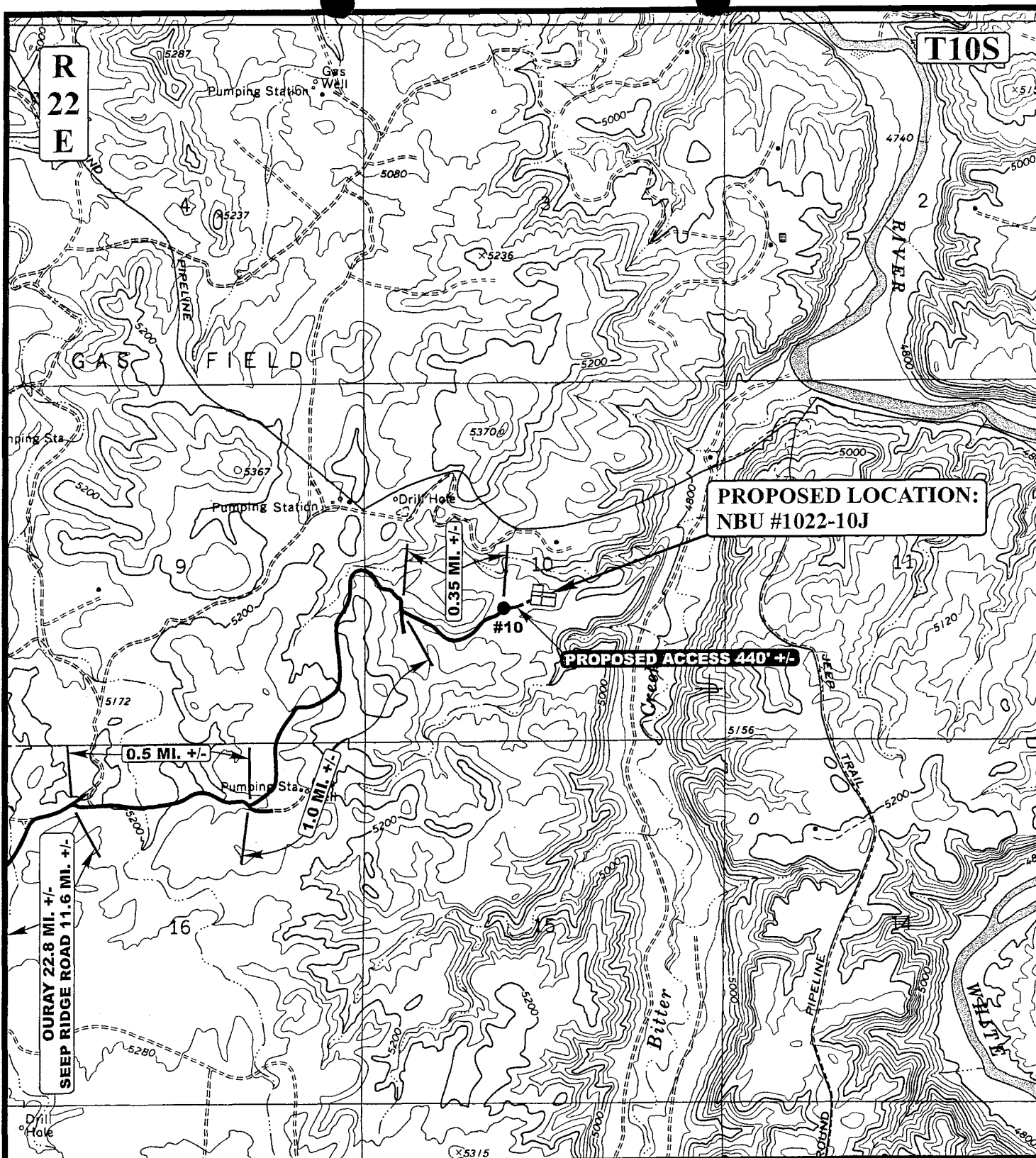
Uintah Engineering & Land Surveying  
85 South 200 East Vernal, Utah 84078  
(435) 789-1017 \* FAX (435) 789-1813

TOPOGRAPHIC  
MAP

06 30 05  
MONTH DAY YEAR

SCALE: 1:100,000 DRAWN BY: C.P. REVISED: 00-00-00





# **LEGEND:**

— EXISTING ROAD

- - - PROPOSED ACCESS ROAD

**WESTPORT OIL AND GAS COMPANY, L.P.**

**NBU #1022-10J**

**SECTION 10, T10S, R22E, S.L.B.&M.**

**2136' FSL 2620' FEL**

**TOPOGRAPHIC  
MAP**

**06 30 05**

**MONTH DAY YEAR**

**SCALE: 1" = 2000'**

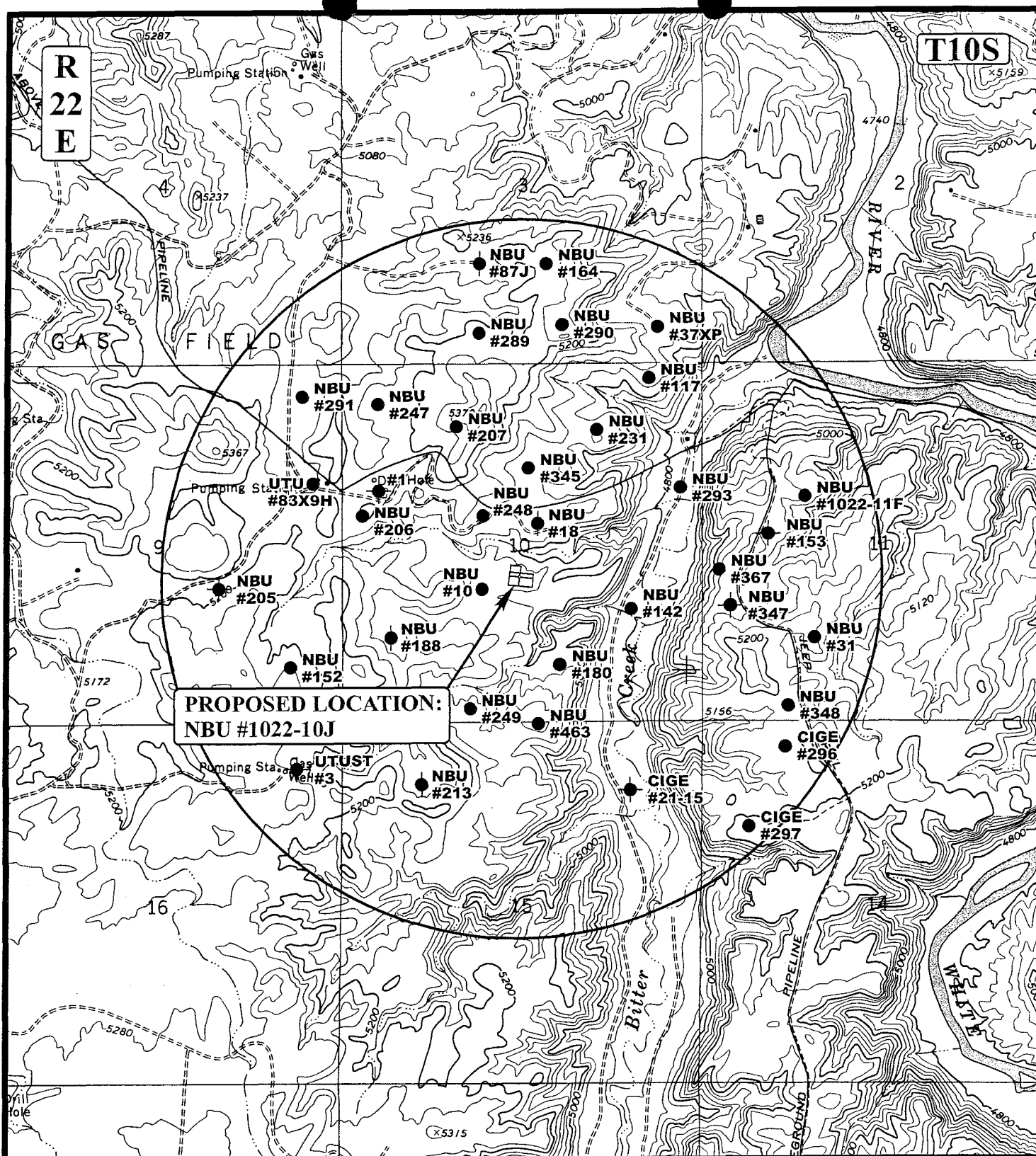
**DRAWN BY: C.P.**

**REVISED: 00-00-00**

**B  
TOPO**

**U  
E  
S**

**Uintah Engineering & Land Surveying**  
85 South 200 East Vernal, Utah 84078  
(435) 789-1017 \* FAX (435) 789-1813









# T10S

R  
22  
E

**PROPOSED LOCATION:**  
**NBU #1022-10J**

**LEGEND:**

- |   |   |
|---|---|
|  DISPOSAL WELLS  |  WATER WELLS           |
|  PRODUCING WELLS |  ABANDONED WELLS       |
|  SHUT IN WELLS   |  TEMPORARILY ABANDONED |

**WESTPORT OIL AND GAS COMPANY, L.P.**

NBU #1022-10J  
SECTION 10, T10S, R22E, S.L.B.&M.  
2136' FSL 2620' FEL



ULIS

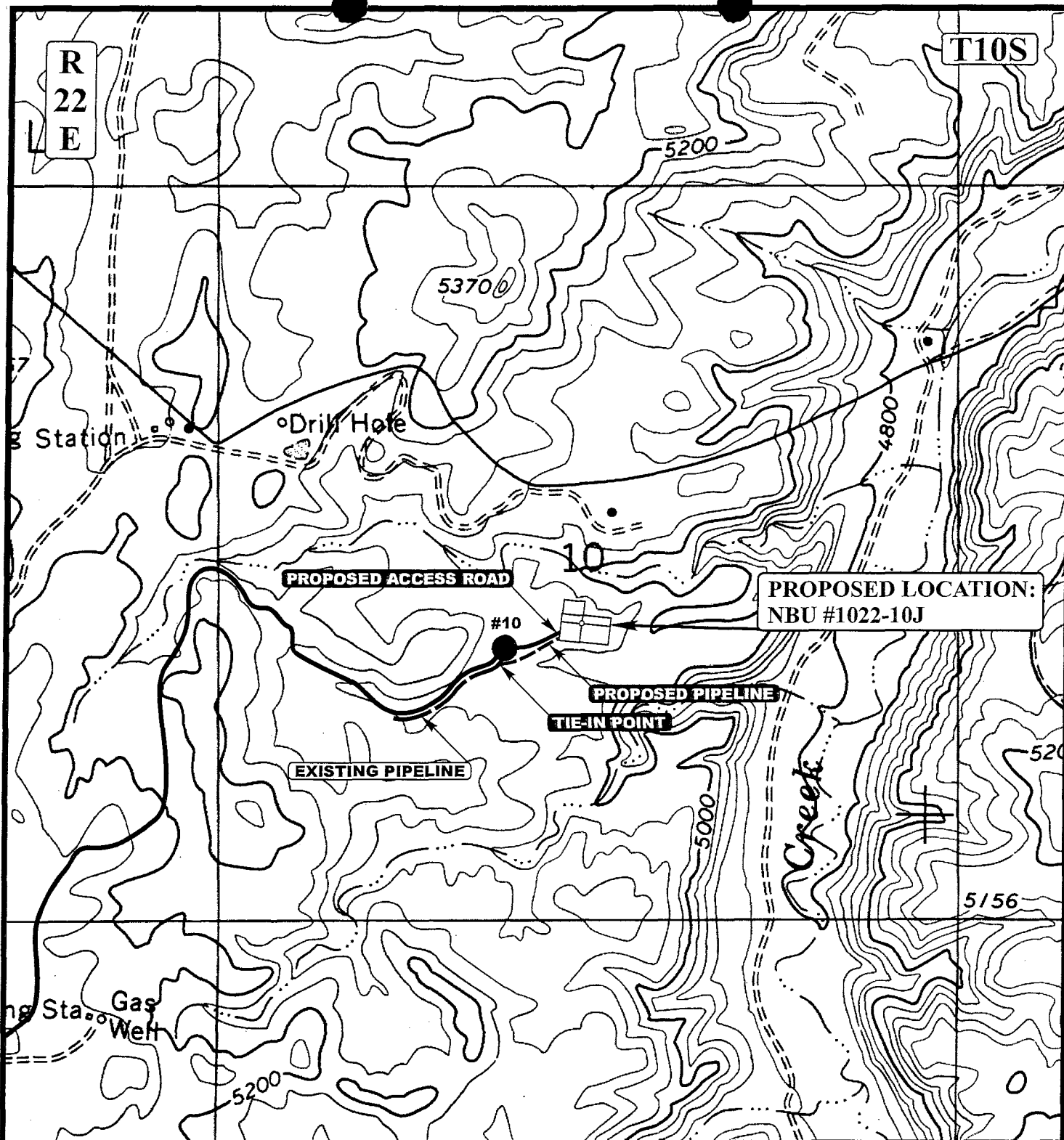
**Uintah Engineering & Land Surveying**  
85 South 200 East Vernal, Utah 84078  
(435) 789-1017 \* FAX (435) 789-1813

TOPOGRAPHIC  
MAP

06	30	05
MONTH	DAY	YEAR

SCALE: 1" = 2000'	DRAWN BY: C.P.	REVISED: 00-00-00
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**C**  
**TOPO**



APPROXIMATE TOTAL PIPELINE DISTANCE = 500' +/-

**LEGEND:**

- PROPOSED ACCESS ROAD
- EXISTING PIPELINE
- PROPOSED PIPELINE



**WESTPORT OIL AND GAS COMPANY, L.P.**

**NBU #1022-10J**

**SECTION 10, T10S, R22E, S.L.B.&M.**

**2136' FSL 2620' FEL**



**Uintah Engineering & Land Surveying**  
 85 South 200 East Vernal, Utah 84078  
 (435) 789-1017 \* FAX (435) 789-1813

**TOPOGRAPHIC**  
**MAP**

**06 30 05**  
 MONTH DAY YEAR

SCALE: 1" = 1000' DRAWN BY: C.P. REVISED: 00-00-00



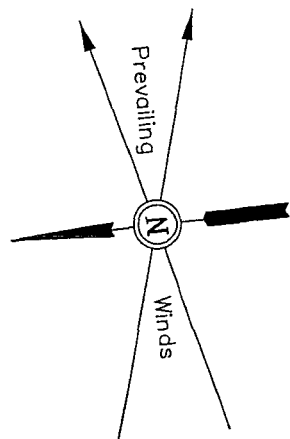
# WESTPORT OIL AND GAS COMPANY, L.P.

## LOCATION LAYOUT FOR

NBU #1022-10J

SECTION 10, T10S, R22E, S.L.B.&M.

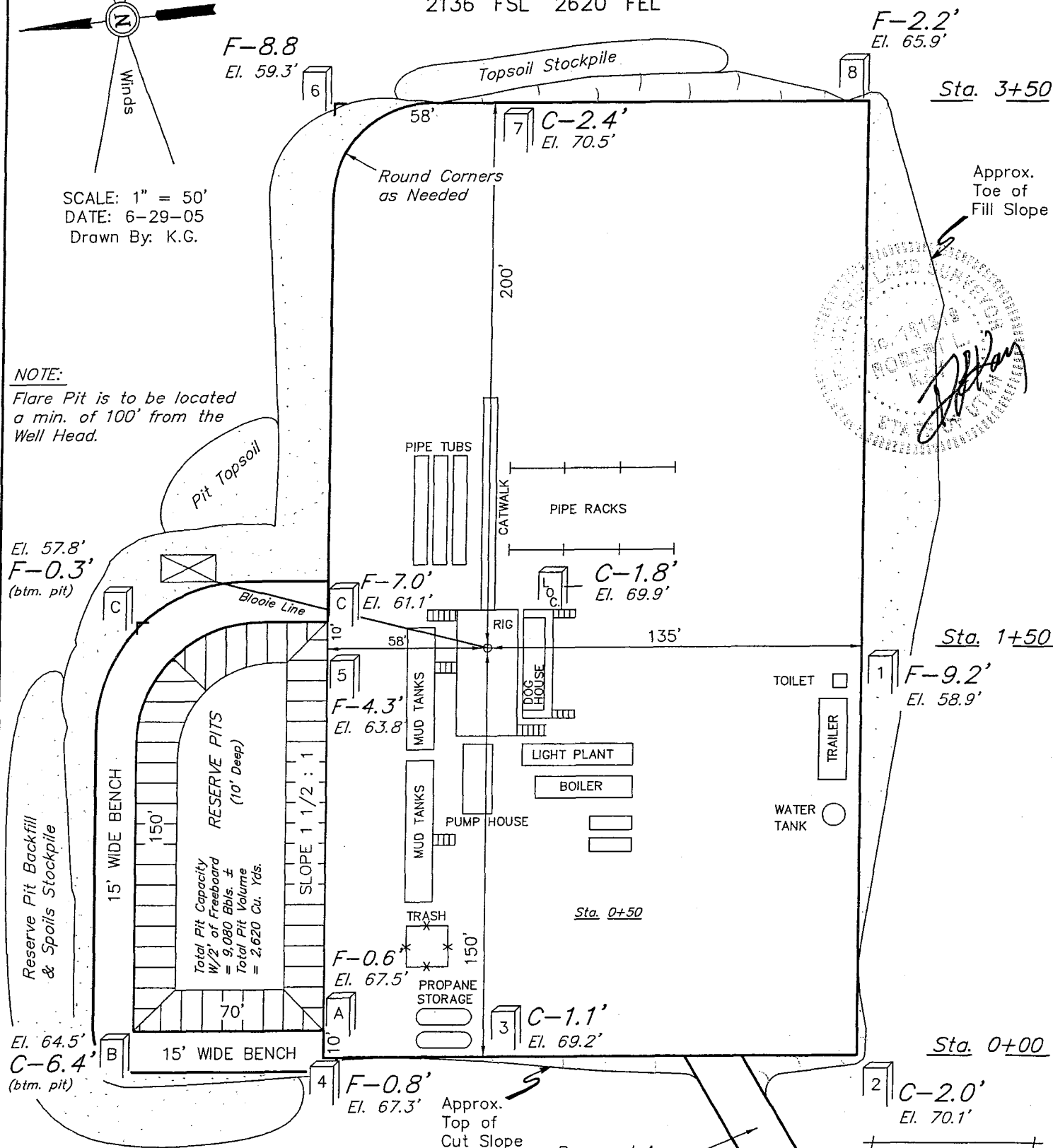
2136' FSL 2620' FEL



SCALE: 1" = 50'  
DATE: 6-29-05  
Drawn By: K.G.

### NOTE:

Flare Pit is to be located  
a min. of 100' from the  
Well Head.



### NOTES:

Elev. Ungraded Ground At Loc. Stake = 5069.9'  
FINISHED GRADE ELEV. AT LOC. STAKE = 5068.1

Approx.  
Top of  
Cut Slope

Proposed Access  
Road

FIGURE #1

UINTAH ENGINEERING & LAND SURVEYING  
85 So. 200 East \* Vernal, Utah 84078 \* (435) 789-1017

*FIGURE #2*

NBU #1022-10J

2136' FSL 2620' FEL



EXCESS MATERIAL	=	3,190 Cu. Yds.
Topsoil & Pit Backfill (1/2 Pit Vol.)	=	3,190 Cu. Yds.
EXCESS UNBALANCE (After Rehabilitation)	=	0 Cu. Yds.

UINTAH ENGINEERING & LAND SURVEYING  
85 So. 200 East \* Vernal, Utah 84078 \* (435) 789-1017

**WORKSHEET**  
**APPLICATION FOR PERMIT TO DRILL**

APD RECEIVED: 09/26/2005

API NO. ASSIGNED: 43-047-37168

WELL NAME: NBU 1022-10J

OPERATOR: WESTPORT OIL & GAS CO ( N2115 )

CONTACT: DEBRA DOMENICI

PHONE NUMBER: 435-781-7060

**PROPOSED LOCATION:**

NWSE 10 100S 220E

SURFACE: 2136 FSL 2620 FEL

BOTTOM: 2136 FSL 2620 FEL

UINTAH

NATURAL BUTTES ( 630 )

LEASE TYPE: 1 - Federal

LEASE NUMBER: UTU-25787

SURFACE OWNER: 1 - Federal

PROPOSED FORMATION: WSMVD

COALBED METHANE WELL? NO

INSPECT LOCATN BY: / /

Tech Review	Initials	Date
Engineering		
Geology		
Surface		

LATITUDE: 39.96202

LONGITUDE: -109.4253

**RECEIVED AND/OR REVIEWED:**

☒ Plat  
☒ Bond: Fed[1] Ind[] Sta[] Fee[]  
(No. CO-1203 )  
☒ Potash (Y/N)  
☒ Oil Shale 190-5 (B) or 190-3 or 190-13  
☒ Water Permit  
(No. 43-8496 )  
☒ RDCC Review (Y/N)  
(Date: )  
☒ Fee Surf Agreement (Y/N)  
☒ Intent to Commingle (Y/N)

**LOCATION AND SITING:**

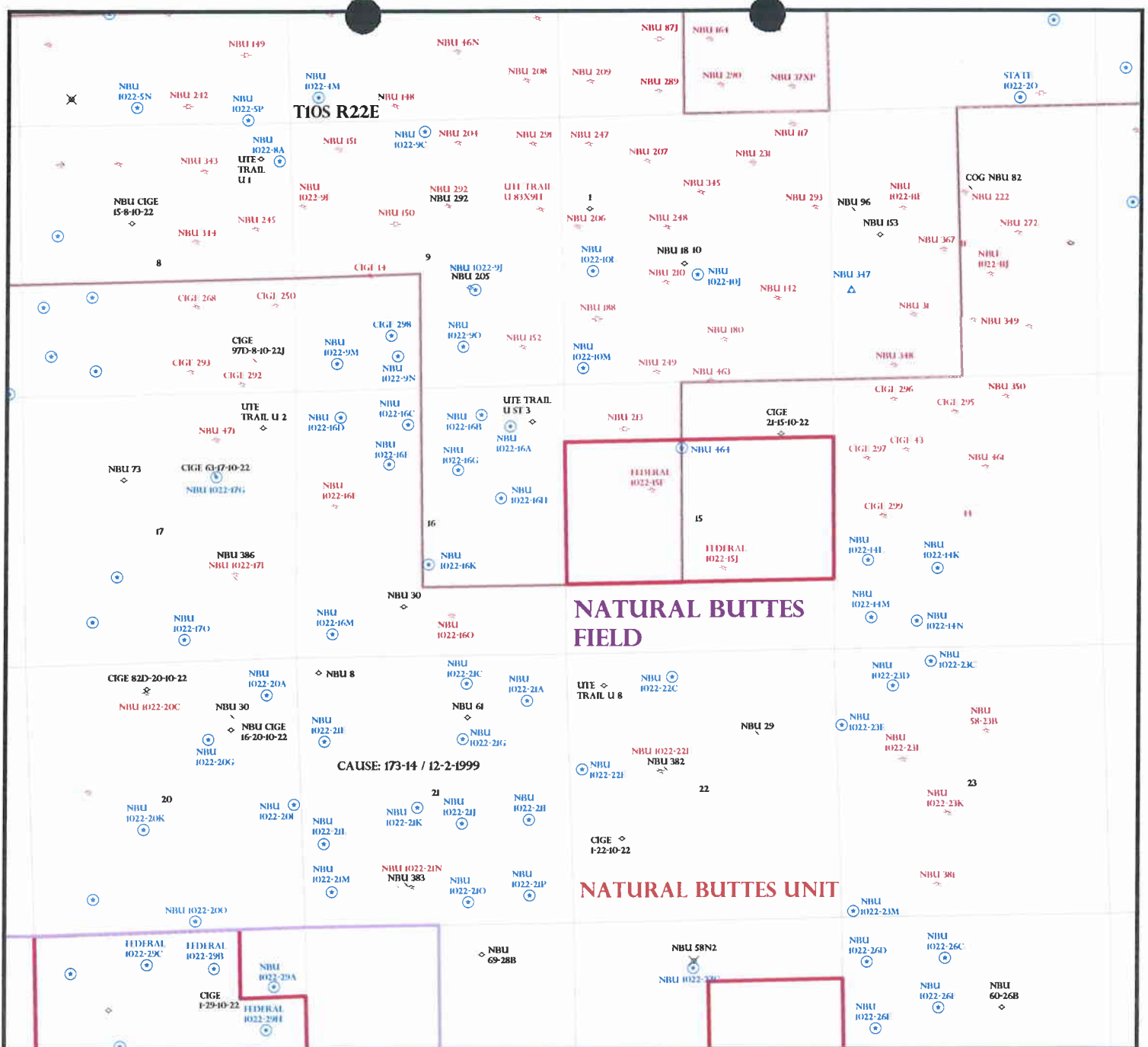
\_\_\_ R649-2-3.  
Unit NATURAL BUTTES  
\_\_\_ R649-3-2. General  
Siting: 460' From Qtr/Qtr & 920' Between Wells  
\_\_\_ R649-3-3. Exception  
☒ Drilling Unit  
Board Cause No: 173-14  
Eff Date: 12-2-99  
Siting: 460' fr u bdr. f uncomm. Tract  
\_\_\_ R649-3-11. Directional Drill

COMMENTS:

*Sup. Separate file*

STIPULATIONS:

*1- Fed. Appr. &  
2- OIL SHALE*



OPERATOR: WESTPORT O&G CO (N2115)

SEC: 9,10,21,22 T. 10S R. 22E

FIELD: NATURAL BUTTES (630)

COUNTY: UTAH

CAUSE: 173-14 / 12-2-1999

**Field Status**

- ABANDONED
- ACTIVE
- COMBINED
- INACTIVE
- PROPOSED
- STORAGE
- TERMINATED

**Unit Status**

- EXPLORATORY
- GAS STORAGE
- NF PP OIL
- NF SECONDARY
- PENDING
- PI OIL
- PP GAS
- PP GEOTHERML
- PP OIL
- SECONDARY
- TERMINATED

**Wells Status**

- GAS INJECTION
- GAS STORAGE
- LOCATION ABANDONED
- NEW LOCATION
- PLUGGED & ABANDONED
- PRODUCING GAS
- PRODUCING OIL
- SHUT-IN GAS
- SHUT-IN OIL
- TEMP. ABANDONED
- TEST WELL
- WATER INJECTION
- WATER SUPPLY
- WATER DISPOSAL
- DRILLING



PREPARED BY: DIANA WHITNEY  
DATE: 27-SEPTEMBER-2005

# United States Department of the Interior

## BUREAU OF LAND MANAGEMENT

Utah State Office

P.O. Box 45155

Salt Lake City, Utah 84145-0155

IN REPLY REFER TO:  
3160  
(UT-922)

September 27, 2005

### Memorandum

To: Assistant District Manager Minerals, Vernal District

From: Michael Coulthard, Petroleum Engineer

Subject: 2005 Plan of Development Natural Buttes Unit Uintah  
County, Utah.

Pursuant to email between Diana Whitney, Division of Oil, Gas and Mining, and Mickey Coulthard, Utah State Office, Bureau of Land Management, the following wells are planned for calendar year 2005 within the Natural Buttes Unit, Uintah County, Utah.

API #	WELL NAME	LOCATION
-------	-----------	----------

(Proposed PZ Wasatch-MesaVerde)

43-047-37166 NBU 1022-9J Sec 09 T10S R22E 1941 FSL 1739 FEL  
43-047-37167 NBU 1022-9N Sec 09 T10S R22E 0661 FSL 1983 FWL  
43-047-37168 NBU 1022-10J Sec 10 T10S R22E 2136 FSL 2620 FEL  
43-047-37169 NBU 1022-10L Sec 10 T10S R22E 2273 FSL 0580 FWL  
43-047-37170 NBU 1022-10M Sec 10 T10S R22E 0364 FSL 0358 FWL  
43-047-37171 NBU 1022-21M Sec 21 T10S R22E 0727 FSL 0560 FWL  
43-047-37172 NBU 1022-21L Sec 21 T10S R22E 1675 FSL 0420 FWL  
43-047-37173 NBU 1022-21P Sec 21 T10S R22E 0579 FSL 0852 FEL  
43-047-37174 NBU 1022-210 Sec 21 T10S R22E 0462 FSL 2059 FEL  
43-047-37175 NBU 1022-21J Sec 21 T10S R22E 2018 FSL 2162 FEL  
43-047-37176 NBU 1022-22E Sec 22 T10S R22E 2247 FNL 0228 FWL  
43-047-37177 NBU 1022-22C Sec 22 T10S R22E 0467 FNL 2018 FWL  
43-047-37165 NBU 1022-27C Sec 27 T10S R22E 0922 FNL 2341 FWL  
43-047-37178 NBU 1022-350 Sec 35 T10S R22E 0610 FSL 2139 FEL  
43-047-37179 NBU 1022-35N Sec 35 T10S R22E 0703 FSL 1995 FWL  
43-047-37180 NBU 1022-35J Sec 35 T10S R22E 1971 FSL 1844 FEL

Page 2

This office has no objection to permitting the wells at this time.

/s/ Michael L. Coulthard

bcc: File – Natural Buttes Unit  
Division of Oil Gas and Mining  
Central Files  
Agr. Sec. Chron  
Fluid Chron

MCoulthard:mc:9-27-05



## State of Utah

### Department of Natural Resources

MICHAEL R. STYLER  
*Executive Director*

### Division of Oil, Gas & Mining

JOHN R. BAZA  
*Division Director*

JON M. HUNTSMAN, JR.  
*Governor*

GARY R. HERBERT  
*Lieutenant Governor*

September 27, 2005

Westport Oil & Gas Company  
1368 South 1200 East  
Vernal, UT 84078

Re: Natural Buttes Unit 1022-10J Well, 2136' FSL, 2620' FEL, NW SE, Sec. 10,  
T. 10 South, R. 22 East, Uintah County, Utah

Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann. § 40-6-1 *et seq.*, Utah Administrative Code R649-3-1 *et seq.*, and the attached Conditions of Approval, approval to drill the referenced well is granted.

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-047-37168.

Sincerely,

A handwritten signature in black ink, appearing to read "Gil Hunt".

Gil Hunt  
Associate Director

pab  
Enclosures

cc: Uintah County Assessor  
Bureau of Land Management, Vernal District Office

Operator: Westport Oil & Gas Company  
Well Name & Number Natural Buttes Unit 1022-10J  
API Number: 43-047-37168  
Lease: UTU-25787

Location: NW SE                      Sec. 10              T. 10 South              R. 22 East

### Conditions of Approval

1. General

Compliance with the requirements of Utah Admin. R. 649-1 *et seq.*, the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

2. Notification Requirements

Notify the Division within 24 hours of spudding the well.

- Contact Carol Daniels at (801) 538-5284.

Notify the Division prior to commencing operations to plug and abandon the well.

- Contact Dan Jarvis at (801) 538-5338

3. Reporting Requirements

All required reports, forms and submittals will be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

4. In accordance with Order in Cause No. 190-5(b) dated October 28, 1982, the Operator shall comply with requirements of Rules R649-3-31 and R649-3-27 pertaining to Designated Oil Shale Areas. Additionally, the operator shall ensure that the surface and/or production casing is properly cemented over the entire oil shale interval as defined by Rule R649-3-31. The Operator shall report the actual depth the oil shale is encountered to the Division.

5. State approval of this well does not supersede the required federal approval, which must be obtained prior to drilling.

Division of Oil, Gas and Mining  
**OPERATOR CHANGE WORKSHEET**

**ROUTING**

1. DJJ

2. CDW

**X Change of Operator (Well Sold)**

Operator Name Change/Merger

The operator of the well(s) listed below has changed, effective:

**1/6/2006**

**FROM: (Old Operator):**

N2115-Westport Oil & Gas Co., LP  
 1368 South 1200 East  
 Vernal, UT 84078  
 Phone: 1-(435) 781-7024

**TO: ( New Operator):**

N2995-Kerr-McGee Oil & Gas Onshore, LP  
 1368 South 1200 East  
 Vernal, UT 84078  
 Phone: 1-(435) 781-7024

CA No.		Unit:		NATURAL BUTTES UNIT				
WELL NAME	SEC	TWN	RNG	API NO	ENTITY NO	LEASE TYPE	WELL TYPE	WELL STATUS

**OPERATOR CHANGES DOCUMENTATION**

Enter date after each listed item is completed

- (R649-8-10) Sundry or legal documentation was received from the **FORMER** operator on: 5/10/2006
- (R649-8-10) Sundry or legal documentation was received from the **NEW** operator on: 5/10/2006
- The new company was checked on the **Department of Commerce, Division of Corporations Database** on: 3/7/2006
- a. Is the new operator registered in the State of Utah: YES Business Number: 1355743-0181
- b. If **NO**, the operator was contacted on: \_\_\_\_\_
- 5a. (R649-9-2)Waste Management Plan has been received on: IN PLACE
- 5b. Inspections of LA PA state/fee well sites complete on: n/a 3 LA wells & all PA wells transferred
- 5c. Reports current for Production/Disposition & Sundries on: ok
- 6. Federal and Indian Lease Wells:** The BLM and or the BIA has approved the merger, name change, or operator change for all wells listed on Federal or Indian leases on: BLM 3/27/2006 BIA not yet
- 7. Federal and Indian Units:**  
The BLM or BIA has approved the successor of unit operator for wells listed on: 3/27/2006
- 8. Federal and Indian Communization Agreements ("CA"):**  
The BLM or BIA has approved the operator for all wells listed within a CA on: n/a
- 9. Underground Injection Control ("UIC")** The Division has approved UIC Form 5, Transfer of Authority to Inject, for the enhanced/secondary recovery unit/project for the water disposal well(s) listed on: \_\_\_\_\_

**DATA ENTRY:**

- Changes entered in the **Oil and Gas Database** on: 5/15/2006
- Changes have been entered on the **Monthly Operator Change Spread Sheet** on: 5/15/2006
- Bond information entered in RBDMS on: 5/15/2006
- Fee/State wells attached to bond in RBDMS on: 5/16/2006
- Injection Projects to new operator in RBDMS on: \_\_\_\_\_
- Receipt of Acceptance of Drilling Procedures for APD/New on: n/a Name Change Only

**BOND VERIFICATION:**

- Federal well(s) covered by Bond Number: CO1203
- Indian well(s) covered by Bond Number: RLB0005239
- (R649-3-1) The **NEW** operator of any fee well(s) listed covered by Bond Number RLB0005236
- a. The **FORMER** operator has requested a release of liability from their bond on: n/a rider added KMG  
The Division sent response by letter on: \_\_\_\_\_

**LEASE INTEREST OWNER NOTIFICATION:**

- (R649-2-10) The **FORMER** operator of the fee wells has been contacted and informed by a letter from the Division of their responsibility to notify all interest owners of this change on: 5/16/2006

**COMMENTS:**

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB No. 1004-0135  
Expires November 30, 2000

**SUNDRY NOTICES AND REPORTS ON WELLS**

**Do not use this form for proposals to drill or reenter an abandoned well. Use Form 3160-3 (APD) for such proposals.**

**SUBMIT IN TRIPLICATE - Other instructions on reverse side**

1. Type of Well

☐ Oil Well ☒ Gas Well ☐ Other

2. Name of Operator

**KERR-McGEE OIL & GAS ONSHORE LP**

3a. Address

**1368 SOUTH 1200 EAST VERNAL, UT 84078**

3b. Phone No. (include area code)

**(435) 781-7024**

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

**SEE ATTACHED**

5. Lease Serial No.

**MULTIPLE LEASES**

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

8. Well Name and No.

**MUTIPLE WELLS**

9. API Well No.

10. Field and Pool, or Exploratory Area

11. County or Parish, State

**UINTAH COUNTY, UTAH**

**12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA**

**TYPE OF SUBMISSION**

☐ Notice of Intent

☒ Subsequent Report

☐ Final Abandonment Notice

**TYPE OF ACTION**

☐ Acidize

☐ Alter Casing

☐ Casing Repair

☐ Change Plans

☐ Convert to Injection

☐ Deepen

☐ Fracture Treat

☐ New Construction

☐ Plug and Abandon

☐ Plug Back

☐ Production (Start/Resume)

☐ Reclamation

☐ Recomplete

☐ Temporarily Abandon

☐ Water Disposal

☐ Water Shut-Off

☐ Well Integrity

☒ Other **CHANGE OF OPERATOR**

13. Describe Proposed or Completed Operations (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.

PLEASE BE ADVISED THAT KERR-McGEE OIL & GAS ONSHORE LP, IS CONSIDERED TO BE THE OPERATOR OF THE ATTACHED WELL LOCATIONS. EFFECTIVE JANUARY 6, 2006.

KERR-McGEE OIL & GAS ONSHORE LP, IS RESPONSIBLE UNDER TERMS AND CONDITIONS OF THE LEASE(S) FOR THE OPERATIONS CONDUCTED UPON LEASE LANDS. BOND COVERAGE IS PROVIDED BY STATE OF UTAH NATIONWIDE BOND NO. RLB0005237.

**RECEIVED**

**MAY 10 2006**

DIV. OF OIL, GAS & MINING

**BLM BOND = C01203**

**BIA BOND = RLB0005237**

**APPROVED 5/16/06**

**Earlene Russell**  
Division of Oil, Gas and Mining  
**Earlene Russell, Engineering Technician**

14. I hereby certify that the foregoing is true and correct

Name (Printed/Typed)

**RANDY BAYNE**

Title

**DRILLING MANAGER**

Signature

Date

**May 9, 2006**

**THIS SPACE FOR FEDERAL OR STATE USE**

Approved by

Title

Date

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

Title 18 U.S.C. Section 1001, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on reverse)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or reenter an abandoned well. Use Form 3160-3 (APD) for such proposals.

FORM APPROVED  
OMB No. 1004-0135  
Expires November 30, 2000

5. Lease Serial No.

MULTIPLE LEASES

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

8. Well Name and No.

MUTIPLE WELLS

9. API Well No.

10. Field and Pool, or Exploratory Area

11. County or Parish, State

UINTAH COUNTY, UTAH

SUBMIT IN TRIPLICATE - Other instructions on reverse side

1. Type of Well

☐ Oil Well ☒ Gas Well ☐ Other

2. Name of Operator

WESTPORT OIL & GAS COMPANY L.P.

3a. Address

1368 SOUTH 1200 EAST VERNAL, UT 84078

3b. Phone No. (include area code)

(435) 781-7024

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

SEE ATTACHED

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other CHANGE OF OPERATOR
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operations (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.

EFFECTIVE JANUARY 6, 2006, WESTPORT OIL & GAS COMPANY L.P., HAS RELINQUISHED THE OPERATORSHIP OF THE ATTACHED WELL LOCATIONS TO KERR-McGEE OIL & GAS ONSHORE LP.

APPROVED 5/16/06  
*Earlene Russell*  
Division of Oil, Gas and Mining  
Earlene Russell, Engineering Technician

RECEIVED  
MAY 10 2006

DIV OF OIL, GAS & MINING

14. I hereby certify that the foregoing is true and correct

Name (Printed/Typed)

BRAD LANEY

Signature

Title

ENGINEERING SPECIALIST

Date

May 9, 2006

THIS SPACE FOR FEDERAL OR STATE USE

Approved by

*Brad Laney*

Title

Office

Date

5-9-06

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Title 18 U.S.C. Section 1001, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on reverse)



## United States Department of the Interior

BUREAU OF LAND MANAGEMENT  
Colorado State Office  
2850 Youngfield Street  
Lakewood, Colorado 80215-7076

IN REPLY REFER TO:

CO922 (MM)  
3106  
COC017387 et. al.

March 23, 2006

### NOTICE

Kerr-McGee Oil & Gas Onshore L.P. :  
1999 Broadway, Suite 3700 : Oil & Gas  
Denver, CO 80202 :

### Merger/Name Change - Recognized

On February 28, 2006 this office received acceptable evidence of the following mergers and name conversion:

Kerr-McGee Oil & Gas Onshore L.P., a Delaware Limited Partnership, and Kerr-McGee Oil & Gas Onshore LLC, a Delaware Limited Partnership merger with and into Westport Oil and Gas Company L.P., a Delaware Limited Partnership, and subsequent Westport Oil & Gas Company L.P. name conversion to Kerr-McGee Oil & Gas Onshore L.P.

For our purposes the merger and name conversion was effective January 4, 2006, the date the Secretary of State of Delaware authenticated the mergers and name conversion.

Kerr-McGee Oil & Gas Onshore L.P. provided a list of oil and gas leases held by the merging parties with the request that the Bureau of Land Management change all their lease records from the named entities to the new entity, Kerr-McGee Oil & Gas Onshore L.P. In response to this request each state is asked to retrieve their own list of leases in the names of these entities from the Bureau of Land Management's (BLM) automated LR2000 data base.

The oil and gas lease files identified on the list provided by Kerr-McGee Oil & Gas Onshore L.P. have been updated as to the merger and name conversion. We have not abstracted the lease files to determine if the entities affected by the acceptance of these documents holds an interest in the lease, nor have we attempt to identify leases where the entity is the operator on the ground that maintains vested record title or operating rights interests. If additional documentation, for change of operator, is required you will be contacted directly by the appropriate Field Office. The Mineral Management Services (MMS) and other applicable BLM offices were notified of the merger with a copy of this notice

Please contact this office if you identify additional leases where the merging party maintains an interest, under our jurisdiction, and we will document the case files with a copy of this notice. If the leases are under the jurisdiction of another State Office that information will be forwarded to them for their action.

Three riders accompanied the merger/name conversion documents which will add Kerr-McGee Oil and Gas Onshore LLC as a principal to the 3 Kerr-McGee bonds maintained by the Wyoming State Office. These riders will be forward to them for their acceptance.

The Nationwide Oil & Gas Continental Casualty Company Bond #158626364 (BLM Bond #CO1203), maintained by the Colorado State Office, will remain in full force and effect until an assumption rider is accepted by the Wyoming State Office that conditions their Nationwide Safeco bond to accept all outstanding liability on the oil and gas leases attached to the Colorado bond.

If you have questions about this action you may call me at 303.239.3768.

/s/Martha L. Maxwell  
Martha L. Maxwell  
Land Law Examiner  
Fluid Minerals Adjudication

**Attachment:**

List of OG Leases to each of the following offices:

MMS MRM, MS 357B-1

WY, UT, NM/OK/TX, MT/ND, WY State Offices

CO Field Offices

Wyoming State Office

Rider #1 to Bond WY2357

Rider #2 to Bond WY1865

Rider #3 to Bond WY1127



# United States Department of the Interior

## BUREAU OF LAND MANAGEMENT

Utah State Office  
P.O. Box 45155  
Salt Lake City, UT 84145-0155  
<http://www.blm.gov>



IN REPLY REFER TO:  
3106  
(UT-922)

March 27, 2006

### Memorandum

To: Vernal Field Office

From: Chief, Branch of Fluid Minerals

Subject: Merger Approval

Attached is an approved copy of the merger recognized by the Bureau of Land Management, Colorado State Office. We have updated our records to reflect the merger from Westport Oil and Gas Company L.P. into Kerr-McGee Onshore Oil and Gas Company. The merger was approved effective January 4, 2006.

Chief, Branch of  
Fluid Minerals

### Enclosure

Approval letter from BLM COSO (2 pp)

cc: MMS, Reference Data Branch, James Sykes, PO Box 25165, Denver CO 80225  
State of Utah, DOGM, Attn: Earlene Russell, PO Box 145801, SLC UT 84114  
Teresa Thompson  
Joe Incardine  
Connie Seare  
Dave Mascarenas  
Susan Bauman

RECEIVED

MAR 28 2006

DIV. OF OIL, GAS & MINERALS

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB No. 1004-0135  
Expires November 30, 2000

**SUNDRY NOTICES AND REPORTS ON WELLS**

**Do not use this form for proposals to drill or reenter an abandoned well. Use Form 3160-3 (APD) for such proposals.**

**SUBMIT IN TRIPLICATE – Other instructions on reverse side**

1. Type of Well

☐ Oil Well ☒ Gas Well ☐ Other

2. Name of Operator

**KERR MCGEE OIL AND GAS ONSHORE LP**

3a. Address

**1368 SOUTH 1200 EAST VERNAL, UT 84078**

3b. Phone No. (include area code)

**435-781-7003**

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

**NWSE 2136' FSL 26<sup>36</sup>' FEL  
SEC 10-T10S-R22E**

5. Lease Serial No.

**UTU-25787**

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

**NATURAL BUTTES**

8. Well Name and No.

**NBU 1022-10J**

9. API Well No.

**4304737168**

10. Field and Pool, or Exploratory Area

**NATURAL BUTTES**

11. County or Parish, State

**UINTAH COUNTY, UTAH**

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other <b>APD EXTENSION</b>
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	<b>DOGM</b>
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operations (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.

THE OPERATOR REQUESTS AUTHORIZATION FOR A ONE YEAR EXTENSION FOR THE SUBJECT WELL LOCATION SO THAT THE DRILLING OPERATIONS MAY BE COMPLETED. THE ORIGINAL APD WAS APPROVED BY THE DIVISION OF OIL, GAS AND MINING ON SEPTEMBER 27, 2005.

Approved by the  
Utah Division of  
Oil, Gas and Mining

Date:

**11-02-06**

By:

**[Signature]**

**COPY SENT TO OPERATOR**

Date:

11-02-06

Initials:

**[Signature]**

14. I hereby certify that the foregoing is true and correct

Name (Printed/Typed)

**RAMEY HOOPES**

Title

**REGULATORY CLERK**

Signature

**[Signature]**

Date

**October 20, 2006**

THIS SPACE FOR FEDERAL OR STATE USE

Approved by

Title

Date

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

Title 18 U.S.C. Section 1001, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on reverse)

**RECEIVED**

**NOV 01 2006**

BUREAU OF OIL, GAS & MINING

**Application for Permit to Drill  
Request for Permit Extension  
Validation**

(this form should accompany the Sundry Notice requesting permit extension)

**API:** 4304737168  
**Well Name:** NBU 1022-10J  
**Location:** NWSE SEC 10- T10S-R22E  
**Company Permit Issued to:** KERR MCGEE OIL AND GAS ONSHORE LP  
**Date Original Permit Issued:** 4/27/2005

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision.

Following is a checklist of some items related to the application, which should be verified.

If located on private land, has the ownership changed, if so, has the surface agreement been updated? Yes ☐ No ☒

Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location? Yes ☐ No ☒

Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well? Yes ☐ No ☒

Have there been any changes to the access route including ownership, or right-of-way, which could affect the proposed location? Yes ☐ No ☒

Has the approved source of water for drilling changed? Yes ☐ No ☒

Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation? Yes ☐ No ☒

Is bonding still in place, which covers this proposed well? Yes ☒ No ☐

Ramey Hooper  
Signature

10/20/2006

Date

Title: REGULAROTY CLERK

Representing: Kerr McGee Oil and Gas Onshore LP

**RECEIVED**

**NOV 01 2006**

**DIV. OF OIL, GAS & MINING**

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB No. 1004-0135  
Expires November 30, 2000

**SUNDRY NOTICES AND REPORTS ON WELLS**

**Do not use this form for proposals to drill or reenter an abandoned well. Use Form 3160-3 (APD) for such proposals.**

**SUBMIT IN TRIPLICATE - Other instructions on reverse side**

1. Type of Well

☐ Oil Well ☒ Gas Well ☐ Other

2. Name of Operator

**KERR MCGEE OIL AND GAS ONSHORE LP**

3a. Address

**1368 SOUTH 1200 EAST, VERNAL, UTAH 84078**

3b. Phone No. (include area code)

**(435)781-7003**

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

**2136'FSL-2620'FEL**

**NWSE SEC 10-T10S-R22E**

5. Lease Serial No.

**UTU-25787**

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

**UNIT #891008900A**

**NATURAL BUTTES UNIT**

8. Well Name and No.

**NBU 1022-10J**

9. API Well No.

**4304737168**

10. Field and Pool, or Exploratory Area

**NATURAL BUTTES**

11. County or Parish, State

**UINTAH, UTAH**

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other APD EXTENSION
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	<b>DOGM</b>
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operations (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.

THE OPERATOR REQUESTS AUTHORIZATION FOR A ONE YEAR EXTENSION FOR THE SUBJECT WELL LOCATION SO THAT THE DRILLING OPERATIONS MAY BE COMPLETED. THE ORIGINAL APD WAS APPROVED BY THE DIVISION OF OIL, GAS AND MINING ON SEPTEMBER 11, 2007.

Approved by the  
Utah Division of  
Oil, Gas and Mining

Date: 11-05-07  
By: [Signature]

COPY SENT TO OPERATOR  
Date: 11-5-07  
Initials: RM

14. I hereby certify that the foregoing is true and correct

Name (Printed/Typed)

**SHEILA UPCHEGO**

Title

**SENIOR LAND ADMIN SPECIALIST**

Signature

Date

**October 11, 2007**

THIS SPACE FOR FEDERAL OR STATE USE

Approved by

Title

Date

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

Title 18 U.S.C. Section 1001, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on reverse)

**RECEIVED**

**NOV 01 2007**

**DIV. OF OIL, GAS & MINING**

**Application for Permit to Drill  
Request for Permit Extension  
Validation**

(this form should accompany the Sundry Notice requesting permit extension)

**API:** 4304737168  
**Well Name:** NBU 1022-10J  
**Location:** NWSE SEC 10-T10S-R22E  
**Company Permit Issued to:** KERR-MCGEE OIL & GAS ONSHORE LP  
**Date Original Permit Issued:** 9/27/2005

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision.

Following is a checklist of some items related to the application, which should be verified.

If located on private land, has the ownership changed, if so, has the surface agreement been updated? Yes ☐ No ☒

Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location? Yes ☐ No ☒

Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well? Yes ☐ No ☒

Have there been any changes to the access route including ownership, or right-of-way, which could affect the proposed location? Yes ☐ No ☒

Has the approved source of water for drilling changed? Yes ☐ No ☒

Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation? Yes ☐ No ☒

Is bonding still in place, which covers this proposed well? Yes ☒ No ☐

  
Signature

10/11/2007

Date

**Title:** SENIOR LAND ADMIN SPECIALIST

**Representing:** KERR-MCGEE OIL & GAS ONSHORE LP

**RECEIVED**

**NOV 01 2007**

**DIV. OF OIL, GAS & MINING**

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

1. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER _____		5. LEASE DESIGNATION AND SERIAL NUMBER: UTU-025187
2. NAME OF OPERATOR: Kerr-McGee Oil & Gas Onshore, LP		6. IF INDIAN, ALLOTTEE OR TRIBE NAME: N/A
3. ADDRESS OF OPERATOR: P.O. Box 173779 CITY Denver STATE CO ZIP 80217-3779		7. UNIT or CA AGREEMENT NAME: N/A
PHONE NUMBER: (720) 929-6226		8. WELL NAME and NUMBER: NBU 1022-10J
4. LOCATION OF WELL FOOTAGES AT SURFACE: 2136' FSL & 2620' FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NWSE 10 10S 22E		9. API NUMBER: 4304737168
COUNTY: Uintah		10. FIELD AND POOL, OR WILDCAT: Natural Buttes Field
STATE: UTAH		

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA			
TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate) Approximate date work will start: _____	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLARE
<input type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only) Date of work completion: _____	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/RESUME)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input checked="" type="checkbox"/> OTHER: <u>APD Extension</u>
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Kerr-McGee Oil & Gas Onshore, LP, respectfully requests a one year extension for this APD in order to complete drilling operations. The Utah Division of Oil, Gas, and Mining initially approved this APD on 9/27/2005.

Approved by the  
Utah Division of  
Oil, Gas and Mining

Date: 11-20-2008  
By: [Signature]

NAME (PLEASE PRINT) <u>Kevin McIntyre</u>	TITLE <u>Regulatory Analyst</u>
SIGNATURE <u>[Signature]</u>	DATE <u>11/14/2008</u>

(This space for State use only)

COPY SENT TO OPERATOR

Date: 11.20.2008

Initials: KS

(See Instructions on Reverse Side)

RECEIVED

NOV 18 2008

DIV. OF OIL, GAS & MINING

**Application for Permit to Drill  
Request for Permit Extension  
Validation**

(this form should accompany the Sundry Notice requesting permit extension)

**API:** 4304737168  
**Well Name:** NBU 1022-10J  
**Location:** NWSE 2136' FSL & 2620' FEL, Sec. 10, T10S R22E  
**Company Permit Issued to:** Kerr-McGee Oil & Gas Onshore, LP  
**Date Original Permit Issued:** 9/27/2005

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision.

Following is a checklist of some items related to the application, which should be verified.

If located on private land, has the ownership changed, if so, has the surface agreement been updated? Yes ☐ No ☒

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Has the approved source of water for drilling changed? Yes ☐ No ☒

Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation? Yes ☐ No ☒

Is bonding still in place, which covers this proposed well? Yes ☒ No ☒

  
\_\_\_\_\_  
Signature

11/14/2008  
\_\_\_\_\_  
Date

**Title:** Regulatory Analyst

**Representing:** Kerr-McGee Oil & Gas Onshore, LP

**RECEIVED**

**NOV 18 2008**

**DIV. OF OIL, GAS & MINING**

# RECEIVED

SEP 20 2005

Form 3160-3  
(August 1999)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

## APPLICATION FOR PERMIT TO DRILL OR REENTER

FORM APPROVED

OMB No. 1004-0136

Expires November 30, 2000

5. Lease Serial No.

UTU-25187

6. If Indian, Allottee or Tribe Name

7. If Unit or CA Agreement, Name and No.

NATURAL BUTTES UNIT

8. Lease Name and Well No.

NBU 1022-10J

9. API Well No.

43-047-37168

10. Field and Pool, or Exploratory

NATURAL BUTTES

11. Sec., T., R., M., or Blk, and Survey or Area

SEC 10-T10S-R22E

12. County or Parish

UINTAH

13. State

UT

1a. Type of Work: ☒ DRILL

☐ REENTER

b. Type of Well: ☐ Oil Well

☒ Gas Well

☐ Other

☐ Single Zone

☒ Multiple Zone

2. Name of Operator

KERR MCGEE OIL AND GAS ONSHORE LP

3A. Address

1368 SOUTH 1200 EAST, VERNAL, UTAH 84078

3b. Phone No. (include area code)

(435) 781-7003

4. Location of Well (Report location clearly and in accordance with any State requirements. \*)

At surface NWSE 2136' FSL 2620' FEL

At proposed prod. Zone

14. Distance in miles and direction from nearest town or post office\*

24.65 MILES SOUTHEAST OF OURAY, UTAH

15. Distance from proposed\*

location to nearest  
property or lease line, ft.  
(Also to nearest drig. unit line, if any)

2136'

16. No. of Acres in lease

600

17. Spacing Unit dedicated to this well

40

18. Distance from proposed location\*  
to nearest well, drilling, completed,  
applied for, on this lease, ft.

REFER TO  
TOPO C

19. Proposed Depth

8600'

20. BLM/BIA Bond No. on file

CO-1203 WYB000291

21. Elevations (Show whether DF, KDB, RT, GL, etc.)

5069.9' GL

22. Approximate date work will start\*

UPON APPROVAL

23. Estimated duration

TO BE DETERMINED

### 24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

1. Well plat certified by a registered surveyor.

2. A Drilling Plan.

3. A Surface Use Plan (if the location is on National Forest System Lands, the  
SUPO shall be filed with the appropriate Forest Service Office.

4. Bond to cover the operations unless covered by an existing bond on file (see  
Item 20 above).

5. Operator certification.

6. Such other site specific information and/or plans as may be required by the  
authorized office.

25. Signature

Title

Name (Printed/Typed)

RAMEY HOOPES

Date

4/27/2006

### REGULATORY CLERK

Approved by (Signature)

Title

Assistant Field Manager  
Lands & Mineral Resources

Name (Printed/Typed)

JERRY KENNEL

Office

VERNAL FIELD OFFICE

NOV 25 2008

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Conditions of approval, if any, are attached.

## CONDITIONS OF APPROVAL ATTACHED

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

\*(Instructions on reverse)

RECEIVED

DEC 08 2008

DIV. OF OIL, GAS & MINING

NOTICE OF APPROVAL

UDOGM

NDS 7/26/05

06 BM 0859A



UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
VERNAL FIELD OFFICE

170 South 500 East

VERNAL, UT 84078

(435) 781-4400



**CONDITIONS OF APPROVAL FOR APPLICATION FOR PERMIT TO DRILL**

Company: Kerr McGee Oil & Gas Onshore, LP  
Well No: NBU 1022-10J  
API No: 43-047-37168

Location: NWSE, Sec. 10, T10S, R22E  
Lease No: UTU-025187  
Agreement: Natural Buttes Unit

Title	Name	Office Phone Number	Cell Phone Number
Petroleum Engineer:	Matt Baker	(435) 781-4490	(435) 828-4470
Petroleum Engineer:	Michael Lee	(435) 781-4432	(435) 828-7875
Petroleum Engineer:	Ryan Angus	(435) 781-4430	(435) 828-7368
Supervisory Petroleum Technician:	Jamie Sparger	(435) 781-4502	(435) 828-3913
Supervisory NRS:	Karl Wright	(435) 781-4484	
NRS/Enviro Scientist:	Holly Villa	(435) 781-4404	(435) 828-3544
NRS/Enviro Scientist:	James Hereford	(435) 781-3412	(435) 828-3546
NRS/Enviro Scientist:	Chuck Macdonald	(435) 781-4441	(435) 828-7481
NRS/Enviro Scientist:	Dan Emmett	(435) 781-3414	(435) 828-4029
NRS/Enviro Scientist:	Paul Percival	(435) 781-4493	(435) 828-7381
NRS/Enviro Scientist:	Anna Figueroa	(435) 781-3407	(435) 828-3548
NRS/Enviro Scientist:	Verlyn Pindell	(435) 781-3402	(435) 828-3547
NRS/Enviro Scientist:	Nathan Packer	(435) 781-3405	(435) 828-3545
NRS/Enviro Scientist:	David Gordon	(435) 781-4424	

Fax: (435) 781-3420

**A COPY OF THESE CONDITIONS SHALL BE FURNISHED TO YOUR  
FIELD REPRESENTATIVE TO INSURE COMPLIANCE**

All lease and/or unit operations are to be conducted in such a manner that full compliance is made with the applicable laws, regulations (43 CFR Part 3160), and this approved Application for Permit to Drill including Surface and Downhole Conditions of Approval. The operator is considered fully responsible for the actions of his subcontractors. A copy of the approved APD must be on location during construction, drilling, and completion operations. **This permit is approved for a two (2) year period, or until lease expiration, whichever occurs first. An additional extension, up to two (2) years, may be applied for by sundry notice prior to expiration.**

**NOTIFICATION REQUIREMENTS**

Location Construction (Notify Environmental Scientist)	-	Forty-Eight (48) hours prior to construction of location and access roads.
Location Completion (Notify Environmental Scientist)	-	Prior to moving on the drilling rig.
Spud Notice (Notify Petroleum Engineer)	-	Twenty-Four (24) hours prior to spudding the well.
Casing String & Cementing (Notify Supv. Petroleum Tech.)	-	Twenty-Four (24) hours prior to running casing and cementing all casing strings.
BOP & Related Equipment Tests (Notify Supv. Petroleum Tech.)	-	Twenty-Four (24) hours prior to initiating pressure tests.
First Production Notice (Notify Petroleum Engineer)	-	Within Five (5) business days after new well begins or production resumes after well has been off production for more than ninety (90) days.

**SURFACE USE PROGRAM  
CONDITIONS OF APPROVAL (COAs)**

- If there is an active Gilsonite mining operation within 2 miles of the well location, operator shall notify the Gilsonite operator at least 48 hours prior to any blasting during construction.
- If paleontological materials are uncovered during construction, the operator is to immediately stop work and contact the Authorized Officer (AO). A determination will be made by the AO as to what mitigation may be necessary for the discovered paleontologic material before construction can continue.
- During operations, if any vertebrate paleontological resources are discovered, all operations affecting such sites shall be immediately suspended, and all discoveries shall be left intact until authorized to proceed by the Authorized Officer. The appropriate Authorized Officer of the Vernal BLM office shall be notified within 48 hrs of the discovery, and a decision as to the preferred alternative/course of action will be rendered.
- The topsoil from the reserve pit shall be stripped and piled separately near the reserve pit. When the reserve pit is closed, it shall be recontoured and the topsoil respread, and the area shall be seeded in the same manner as the location topsoil.
- Once the location is plugged and abandoned, it shall be recontoured to natural contours, topsoil respread where appropriate, and the entire location seeded with the recommended seed mix. Seeding shall take place by broadcasting the seed and walking it into the soil with a dozer immediately after the dirt work is completed.
- Seeding shall occur in the fall (August 1<sup>st</sup> until snow or ground is frozen) with the recommended seed mix:

Crested Wheatgrass	<i>Agropyron cristatum</i>	2 lbs. /acre
Western Wheatgrass	<i>Agropyron smithii</i>	2 lbs. /acre
Ladak alfalfa	<i>Medicago sativa var. Ladak</i>	1 lbs. /acre
Shadscale	<i>Atriplex confertifolia</i>	2 lbs. /acre
Fourwing saltbush	<i>Atriplex canescens</i>	3 lbs. /acre

- All pounds are in pure live seed.
  - Reseeding may be required if first seeding is not successful
- If construction or drilling is proposed from April 1<sup>st</sup> through July 15<sup>th</sup>, a BLM-approved biologist will conduct a nest survey. No construction or drilling will be allowed within 0.5 mile of an active Red-tailed hawk nest.

**DOWNHOLE PROGRAM  
CONDITIONS OF APPROVAL (COAs)**

**SITE SPECIFIC DOWNHOLE COAs:**

- A surface casing shoe integrity test shall be performed.

**All provisions outlined in Onshore Oil & Gas Order #2 Drilling Operations shall be strictly adhered to.** The following items are emphasized:

**DRILLING/COMPLETION/PRODUCING OPERATING STANDARDS**

- The spud date and time shall be reported orally to Vernal Field Office within 24 hours of spudding.
- Notify Vernal Field Office Supervisory Petroleum Engineering Technician at least 24 hours in advance of casing cementing operations and BOPE & casing pressure tests.
- All requirements listed in Onshore Order #2 III. E. Special Drilling Operations are applicable for air drilling of surface hole.
- Blowout prevention equipment (BOPE) shall remain in use until the well is completed or abandoned. Closing unit controls shall remain unobstructed and readily accessible at all times. Choke manifolds shall be located outside of the rig substructure.
- All BOPE components shall be inspected daily and those inspections shall be recorded in the daily drilling report. Components shall be operated and tested as required by Onshore Oil & Gas Order No. 2 to insure good mechanical working order. All BOPE pressure tests shall be performed by a test pump with a chart recorder and **NOT** by the rig pumps. Test shall be reported in the driller's log.
- BOP drills shall be initially conducted by each drilling crew within 24 hours of drilling out from under the surface casing and weekly thereafter as specified in Onshore Oil & Gas Order No. 2.
- Casing pressure tests are required before drilling out from under all casing strings set and cemented in place.
- No aggressive/fresh hard-banded drill pipe shall be used within casing.
- **Cement baskets shall not be run on surface casing.**
- The operator must report all shows of water or water-bearing sands to the BLM. If flowing water is encountered it must be sampled, analyzed, and a copy of the analyses submitted to the BLM Vernal Field Office.
- The operator must report encounters of all non oil & gas mineral resources (such as Gilsonite, tar sands, oil shale, trona, etc.) to the Vernal Field Office, in writing, within 5 working days of each encounter. Each report shall include the well name/number, well location, date and depth (from KB or GL) of encounter, vertical footage of the encounter and, the name of the person

making the report (along with a telephone number) should the BLM need to obtain additional information.

- A complete set of angular deviation and directional surveys of a directional well will be submitted to the Vernal BLM office engineer within 30 days of the completion of the well.
- While actively drilling, chronologic drilling progress reports shall be filed directly with the BLM, Vernal Field Office on a weekly basis in sundry, letter format or e-mail to the Petroleum Engineers until the well is completed.
- A cement bond log (CBL) will be run from the production casing shoe to the top of cement and shall be utilized to determine the bond quality for the production casing. Submit a field copy of the CBL to this office.
- **Please submit an electronic copy of all other logs run on this well in LAS format to UT\_VN\_Welllogs@BLM.gov. This submission will supersede the requirement for submittal of paper logs to the BLM.**
- There shall be no deviation from the proposed drilling, completion, and/or workover program as approved. Safe drilling and operating practices must be observed. Any changes in operation must have prior approval from the BLM Vernal Field Office.

## OPERATING REQUIREMENT REMINDERS:

- All wells, whether drilling, producing, suspended, or abandoned, shall be identified in accordance with 43 CFR 3162.6. There shall be a sign or marker with the name of the operator, lease serial number, well number, and surveyed description of the well.
- In accordance with 43 CFR 3162.4-3, this well shall be reported on the "Monthly Report of Operations" (Oil and Gas Operations Report ((OGOR)) starting with the month in which operations commence and continue each month until the well is physically plugged and abandoned. This report shall be filed in duplicate, directly with the Minerals Management Service, P.O. Box 17110, Denver, Colorado 80217-0110, or call 1-800-525-7922 (303) 231-3650 for reporting information.
- Should the well be successfully completed for production, the BLM Vernal Field office must be notified when it is placed in a producing status. Such notification will be by written communication and must be received in this office by not later than the fifth business day following the date on which the well is placed on production. The notification shall provide, as a minimum, the following informational items:
  - Operator name, address, and telephone number.
  - Well name and number.
  - Well location ( $\frac{1}{4}$  Sec., Twn, Rng, and P.M.).
  - Date well was placed in a producing status (date of first production for which royalty will be paid).
  - The nature of the well's production, (i.e., crude oil, or crude oil and casing head gas, or natural gas and entrained liquid hydrocarbons).
  - The Federal or Indian lease prefix and number on which the well is located; otherwise the non-Federal or non-Indian land category, i.e., State or private.
  - Unit agreement and/or participating area name and number, if applicable.
  - Communitization agreement number, if applicable.
- Any venting or flaring of gas shall be done in accordance with Notice to Lessees (NTL) 4A and needs prior approval from the BLM Vernal Field Office.
- All undesirable events (fires, accidents, blowouts, spills, discharges) as specified in NTL 3A will be reported to the BLM, Vernal Field Office. Major events, as defined in NTL3A, shall be reported verbally within 24 hours, followed by a written report within 15 days. "Other than Major Events" will be reported in writing within 15 days. "Minor Events" will be reported on the Monthly Report of Operations and Production.
- Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (BLM Form 3160-4) shall be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3162.4-1. Two copies of all logs run, core descriptions, and all other surveys or

data obtained and compiled during the drilling, workover, and/or completion operations, shall be filed on BLM Form 3160-4. Submit with the well completion report a geologic report including, at a minimum, formation tops, and a summary and conclusions. Also include deviation surveys, sample descriptions, strip logs, core data, drill stem test data, and results of production tests if performed. Samples (cuttings, fluid, and/or gas) shall be submitted only when requested by the BLM, Vernal Field Office.

- All off-lease storage, off-lease measurement, or commingling on-lease or off-lease, shall have prior written approval from the BLM Vernal Field Office.
- Oil and gas meters shall be calibrated in place prior to any deliveries. The BLM Vernal Field Office Petroleum Engineers will be provided with a date and time for the initial meter calibration and all future meter proving schedules. A copy of the meter calibration reports shall be submitted to the BLM Vernal Field Office. All measurement facilities will conform to the API standards for liquid hydrocarbons and the AGA standards for natural gas measurement. All measurement points shall be identified as the point of sale or allocation for royalty purposes.
- A schematic facilities diagram as required by Onshore Oil & Gas Order No. 3 shall be submitted to the BLM Vernal Field Office within 30 days of installation or first production, whichever occurs first. All site security regulations as specified in Onshore Oil & Gas Order No. 3 shall be adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed in accordance with Onshore Oil & Gas Order No. 3.
- Any additional construction, reconstruction, or alterations of facilities, including roads, gathering lines, batteries, etc., which will result in the disturbance of new ground, shall require the filing of a suitable plan and need prior approval of the BLM Vernal Field Office. Emergency approval may be obtained orally, but such approval does not waive the written report requirement.
- No location shall be constructed or moved, no well shall be plugged, and no drilling or workover equipment shall be removed from a well to be placed in a suspended status without prior approval of the BLM Vernal Field Office. If operations are to be suspended for more than 30 days, prior approval of the BLM Vernal Field Office shall be obtained and notification given before resumption of operations.
- Pursuant to Onshore Oil & Gas Order No. 7, this is authorization for pit disposal of water produced from this well for a period of 90 days from the date of initial production. A permanent disposal method must be approved by this office and in operation prior to the end of this 90-day period. In order to meet this deadline, an application for the proposed permanent disposal method shall be submitted along with any necessary water analyses, as soon as possible, but no later than 45 days after the date of first production. Any method of disposal which has not been approved prior to the end of the authorized 90-day period will be considered as an Incident of Noncompliance and will be grounds for issuing a shut-in order until an acceptable manner for disposing of said water is provided and approved by this office.
- Unless the plugging is to take place immediately upon receipt of oral approval, the Field Office Petroleum Engineers must be notified at least 24 hours in advance of the plugging of the well, in order that a representative may witness plugging operations. If a well is suspended or abandoned, all pits must be fenced immediately until they are backfilled. The "Subsequent Report of Abandonment" (Form BLM 3160-5) must be submitted within 30 days after the actual plugging of the well bore, showing location of plugs, amount of cement in each, and amount of casing left in hole, and the current status of the surface restoration.

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		<b>FORM 9</b>			
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> UTU-25787			
<b>1. TYPE OF WELL</b> Gas Well		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>			
<b>2. NAME OF OPERATOR:</b> KERR-MCGEE OIL & GAS ONSHORE, L.P.		<b>7. UNIT or CA AGREEMENT NAME:</b> NATURAL BUTTES			
<b>3. ADDRESS OF OPERATOR:</b> P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779		<b>8. WELL NAME and NUMBER:</b> NBU 1022-10J			
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 2136 FSL 2620 FEL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NWSE Section: 10 Township: 10.0S Range: 22.0E Meridian: S		<b>9. API NUMBER:</b> 43047371680000			
<b>PHONE NUMBER:</b> 720 929-6007 Ext		<b>9. FIELD and POOL or WILDCAT:</b> NATURAL BUTTES			
<b>COUNTY:</b> UINTAH		<b>STATE:</b> UTAH			
<b>11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA</b>					
<b>TYPE OF SUBMISSION</b>	<b>TYPE OF ACTION</b>				
<input checked="" type="checkbox"/> <b>NOTICE OF INTENT</b> Approximate date work will start: 11/16/2009  <input type="checkbox"/> <b>SUBSEQUENT REPORT</b> Date of Work Completion:  <input type="checkbox"/> <b>SPUD REPORT</b> Date of Spud:  <input type="checkbox"/> <b>DRILLING REPORT</b> Report Date:	<table style="width: 100%; border: none;"> <tr> <td style="width: 33%; vertical-align: top;"> <input type="checkbox"/> ACIDIZE  <input type="checkbox"/> CHANGE TO PREVIOUS PLANS  <input type="checkbox"/> CHANGE WELL STATUS  <input type="checkbox"/> DEEPEN  <input type="checkbox"/> OPERATOR CHANGE  <input type="checkbox"/> PRODUCTION START OR RESUME  <input type="checkbox"/> REPERFORATE CURRENT FORMATION  <input type="checkbox"/> TUBING REPAIR  <input type="checkbox"/> WATER SHUTOFF  <input type="checkbox"/> WILDCAT WELL DETERMINATION         </td> <td style="width: 33%; vertical-align: top;"> <input type="checkbox"/> ALTER CASING  <input type="checkbox"/> CHANGE TUBING  <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS  <input type="checkbox"/> FRACTURE TREAT  <input type="checkbox"/> PLUG AND ABANDON  <input type="checkbox"/> RECLAMATION OF WELL SITE  <input type="checkbox"/> SIDETRACK TO REPAIR WELL  <input type="checkbox"/> VENT OR FLARE  <input type="checkbox"/> SI TA STATUS EXTENSION  <input type="checkbox"/> OTHER         </td> <td style="width: 33%; vertical-align: top;"> <input type="checkbox"/> CASING REPAIR  <input type="checkbox"/> CHANGE WELL NAME  <input type="checkbox"/> CONVERT WELL TYPE  <input type="checkbox"/> NEW CONSTRUCTION  <input type="checkbox"/> PLUG BACK  <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION  <input type="checkbox"/> TEMPORARY ABANDON  <input type="checkbox"/> WATER DISPOSAL  <input checked="" type="checkbox"/> APD EXTENSION          OTHER:       </td> </tr> </table>		<input type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> OTHER	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input checked="" type="checkbox"/> APD EXTENSION OTHER:
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<b>12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.</b> Kerr-McGee Oil & Gas Onshore, L.P. (Kerr-McGee) respectfully requests an extension to this APD for the maximum time allowed. Please contact the undersigned with any questions and/or comments. Thank you.					
<div style="text-align: right;"> <b>Approved by the Utah Division of Oil, Gas and Mining</b> </div>		<b>Date:</b> November 12, 2009			
<div style="text-align: right;"> <b>By:</b> </div>					
<b>NAME (PLEASE PRINT)</b> Danielle Piernot		<b>PHONE NUMBER</b> 720 929-6156			
<b>SIGNATURE</b> N/A		<b>TITLE</b> Regulatory Analyst			
		<b>DATE</b> 11/11/2009			

**RECEIVED** November 11, 2009



## The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

### Request for Permit Extension Validation Well Number 43047371680000

**API:** 43047371680000

**Well Name:** NBU 1022-10J

**Location:** 2136 FSL 2620 FEL QTR NWSE SEC 10 TWNP 100S RNG 220E MER S

**Company Permit Issued to:** KERR-MCGEE OIL & GAS ONSHORE, L.P.

**Date Original Permit Issued:** 9/27/2005

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision. Following is a checklist of some items related to the application, which should be verified.

- If located on private land, has the ownership changed, if so, has the surface agreement been updated? ☐ Yes ☒ No
- Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location? ☐ Yes ☒ No
- Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well? ☐ Yes ☒ No
- Have there been any changes to the access route including ownership, or rightof- way, which could affect the proposed location? ☐ Yes ☒ No
- Has the approved source of water for drilling changed? ☐ Yes ☒ No
- Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation? ☐ Yes ☒ No
- Is bonding still in place, which covers this proposed well? ☒ Yes ☐ No

**Approved by the  
Utah Division of  
Oil, Gas and Mining**

**Signature:** Danielle Piernot

**Date:** 11/11/2009

**Title:** Regulatory Analyst **Representing:** KERR-MCGEE OIL & GAS ONSHORE, L.P.

**Date:** November 12, 2009

**By:** 

**RECEIVED** November 11, 2009

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		<b>FORM 9</b>			
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> UTU-25787			
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<b>TYPE OF SUBMISSION</b>	<b>TYPE OF ACTION</b>				
<input checked="" type="checkbox"/> <b>NOTICE OF INTENT</b> Approximate date work will start: 9/27/2010  <input type="checkbox"/> <b>SUBSEQUENT REPORT</b> Date of Work Completion:  <input type="checkbox"/> <b>SPUD REPORT</b> Date of Spud:  <input type="checkbox"/> <b>DRILLING REPORT</b> Report Date:	<table style="width: 100%; border: none;"> <tr> <td style="width: 33%; vertical-align: top;"> <input type="checkbox"/> ACIDIZE  <input type="checkbox"/> CHANGE TO PREVIOUS PLANS  <input type="checkbox"/> CHANGE WELL STATUS  <input type="checkbox"/> DEEPEN  <input type="checkbox"/> OPERATOR CHANGE  <input type="checkbox"/> PRODUCTION START OR RESUME  <input type="checkbox"/> REPERFORATE CURRENT FORMATION  <input type="checkbox"/> TUBING REPAIR  <input type="checkbox"/> WATER SHUTOFF  <input type="checkbox"/> WILDCAT WELL DETERMINATION         </td> <td style="width: 33%; vertical-align: top;"> <input type="checkbox"/> ALTER CASING  <input type="checkbox"/> CHANGE TUBING  <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS  <input type="checkbox"/> FRACTURE TREAT  <input type="checkbox"/> PLUG AND ABANDON  <input type="checkbox"/> RECLAMATION OF WELL SITE  <input type="checkbox"/> SIDETRACK TO REPAIR WELL  <input type="checkbox"/> VENT OR FLARE  <input type="checkbox"/> SI TA STATUS EXTENSION  <input type="checkbox"/> OTHER         </td> <td style="width: 33%; vertical-align: top;"> <input type="checkbox"/> CASING REPAIR  <input type="checkbox"/> CHANGE WELL NAME  <input type="checkbox"/> CONVERT WELL TYPE  <input type="checkbox"/> NEW CONSTRUCTION  <input type="checkbox"/> PLUG BACK  <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION  <input type="checkbox"/> TEMPORARY ABANDON  <input type="checkbox"/> WATER DISPOSAL  <input checked="" type="checkbox"/> APD EXTENSION            OTHER: <input style="width: 100px;" type="text"/> </td> </tr> </table>		<input type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> OTHER	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input checked="" type="checkbox"/> APD EXTENSION OTHER: <input style="width: 100px;" type="text"/>
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<div style="text-align: right;"> <b>Approved by the Utah Division of Oil, Gas and Mining</b> </div>		<b>Date:</b> <u>September 28, 2010</u>  <b>By:</b>			
<b>NAME (PLEASE PRINT)</b> Danielle Piernot		<b>PHONE NUMBER</b> 720 929-6156			
<b>SIGNATURE</b> N/A		<b>TITLE</b> Regulatory Analyst			
<b>DATE</b> 9/20/2010					



## The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

### Request for Permit Extension Validation Well Number 43047371680000

**API:** 43047371680000

**Well Name:** NBU 1022-10J

**Location:** 2136 FSL 2620 FEL QTR NWSE SEC 10 TWNP 100S RNG 220E MER S

**Company Permit Issued to:** KERR-MCGEE OIL & GAS ONSHORE, L.P.

**Date Original Permit Issued:** 9/27/2005

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision. Following is a checklist of some items related to the application, which should be verified.

- If located on private land, has the ownership changed, if so, has the surface agreement been updated? ☐ Yes ☒ No
- Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location? ☐ Yes ☒ No
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- Has the approved source of water for drilling changed? ☐ Yes ☒ No
- Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation? ☐ Yes ☒ No
- Is bonding still in place, which covers this proposed well? ☒ Yes ☐ No

**Approved by the  
Utah Division of  
Oil, Gas and Mining**

**Signature:** Danielle Piernot

**Date:** 9/20/2010

**Title:** Regulatory Analyst **Representing:** KERR-MCGEE OIL & GAS ONSHORE, L.P.

**Date:** September 28, 2010

**By:** 

**RECEIVED** September 20, 2010

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

RECEIVED

FORM APPROVED  
OMB NO. 1004-0135  
Expires: July 31, 2010

OCT 28 2010

**SUNDRY NOTICES AND REPORTS ON WELLS**  
**Do not use this form for proposals to drill or to re-enter an**  
**abandoned well. Use form 3160-3 (APD) for such proposals**

BLM

**SUBMIT IN TRIPLICATE - Other instructions on reverse side.**

1. Type of Well <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other		5. Lease Serial No. UTU025187
2. Name of Operator KERR MCGEE OIL & GAS ONSHORE		6. If Indian, Allottee or Tribe Name
Contact: ANDY LYTLE Email: andrew.lytle@anadarko.com		7. If Unit or CA/Agreement, Name and/or No. UTU63047A
3a. Address 1368 SOUTH 1200 EAST VERNAL, UT 84078	3b. Phone No. (include area code) Ph: 720-929-6100	8. Well Name and No. NBU 1022-10J
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec 10 T10S R22E NWSE 2136FSL 2620FEL		9. API Well No. 43-047-37168-00-X1
		10. Field and Pool, or Exploratory NATURAL BUTTES
		11. County or Parish, and State UINTAH COUNTY, UT

**12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA**

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	Change to Original
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	PD

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleate horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleation in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

The Bureau of Land Management approved the the subject well's Application for Permit to Drill (APD) on 11/25/2008.

Kerr-McGee Oil & Gas Onshore, L.P. (Kerr-McGee) respectfully requests an extension to this APD for the maximum time allowed. Please contact the undersigned with any questions. Thank you.

RECEIVED

DEC 06 2010

DIV. OF OIL, GAS &amp; MINING

**CONDITIONS OF APPROVAL ATTACHED**

VERNAL FIELD OFFICE	
ENG. <i>RLH</i> 11/15/10	
GEOL. _____	
E.S. _____	
PET. _____	
RECL. _____	

14. I hereby certify that the foregoing is true and correct.

Electronic Submission #96052 verified by the BLM Well Information System  
For KERR MCGEE OIL & GAS ONSHORE L, sent to the Vernal  
Committed to AFMSS for processing by GAIL JENKINS on 11/02/2010 (11GXJ0378SE)

Name (Printed/Typed) ANDY LYTLE

Title REGULATORY ANALYST

Signature (Electronic Submission)

Date 10/28/2010

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved By <i>[Signature]</i>	Title Acting Assistant Field Manager Lands & Mineral Resources	Date NOV 16 2010
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.		
Office VERNAL FIELD OFFICE		

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

\*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\*

UDOGM

## Revisions to Operator-Submitted EC Data for Sundry Notice #96052

	Operator Submitted	BLM Revised (AFMSS)
Sundry Type:	OTHER NOI	APDCH NOI
Lease:	UTU025187	UTU025187
Agreement:		UTU63047A
Operator:	KERR-MCGEE OIL&GAS ONSHORE, LP P.O. BOX 173779 DENVER, CO 80217 Ph: 720-929-6000	KERR MCGEE OIL & GAS ONSHORE L 1368 SOUTH 1200 EAST VERNAL, UT 84078 Ph: 435.789.3995
Admin Contact:	ANDY LYTLE REGULATORY ANALYST E-Mail: andrew.lytle@anadarko.com  Ph: 720-929-6100	ANDY LYTLE REGULATORY ANALYST E-Mail: andrew.lytle@anadarko.com  Ph: 720-929-6100
Tech Contact:	ANDY LYTLE REGULATORY ANALYST E-Mail: andrew.lytle@anadarko.com  Ph: 720-929-6100	ANDY LYTLE REGULATORY ANALYST E-Mail: andrew.lytle@anadarko.com  Ph: 720-929-6100
Location: State: County:	UT UINTAH	UT UINTAH
Field/Pool:	NATURAL BUTTES	NATURAL BUTTES
Well/Facility:	NBU 1022-10J Sec 10 T10S R22E NWSE 2136FSL 2620FEL	NBU 1022-10J Sec 10 T10S R22E NWSE 2136FSL 2620FEL

# **CONDITIONS OF APPROVAL**

## **Kerr McGee Oil and Gas Onshore LP.**

### **Notice of Intent APD Extension**

**Lease:** UTU-025187  
**Well:** NBU 1022-10J  
**Location:** NWSE Sec 10-T10S-R22E

An extension for the referenced APD is granted with the following conditions:

---

1. The extension and APD shall expire on 11/25/2012.
2. No other extension shall be granted.

If you have any other questions concerning this matter, please contact Robin L Hansen of this office at (435) 781-2777

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		<b>FORM 9</b>
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> UTU-25787
<b>1. TYPE OF WELL</b> Gas Well		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>
<b>2. NAME OF OPERATOR:</b> KERR-MCGEE OIL & GAS ONSHORE, L.P.		<b>7. UNIT or CA AGREEMENT NAME:</b> NATURAL BUTTES
<b>3. ADDRESS OF OPERATOR:</b> P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779		<b>8. WELL NAME and NUMBER:</b> NBU 1022-10J
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 2136 FSL 2620 FEL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NWSE Section: 10 Township: 10.0S Range: 22.0E Meridian: S		<b>9. API NUMBER:</b> 43047371680000
<b>PHONE NUMBER:</b> 720 929-6007 Ext		<b>9. FIELD and POOL or WILDCAT:</b> NATURAL BUTTES
<b>COUNTY:</b> UINTAH		<b>STATE:</b> UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> <b>NOTICE OF INTENT</b> Approximate date work will start: 12/16/2010  <input type="checkbox"/> <b>SUBSEQUENT REPORT</b> Date of Work Completion:  <input type="checkbox"/> <b>SPUD REPORT</b> Date of Spud:  <input type="checkbox"/> <b>DRILLING REPORT</b> Report Date:	<input type="checkbox"/> ACIDIZE <input checked="" type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> OTHER	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION OTHER: <input style="width: 100px;" type="text"/>

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.  

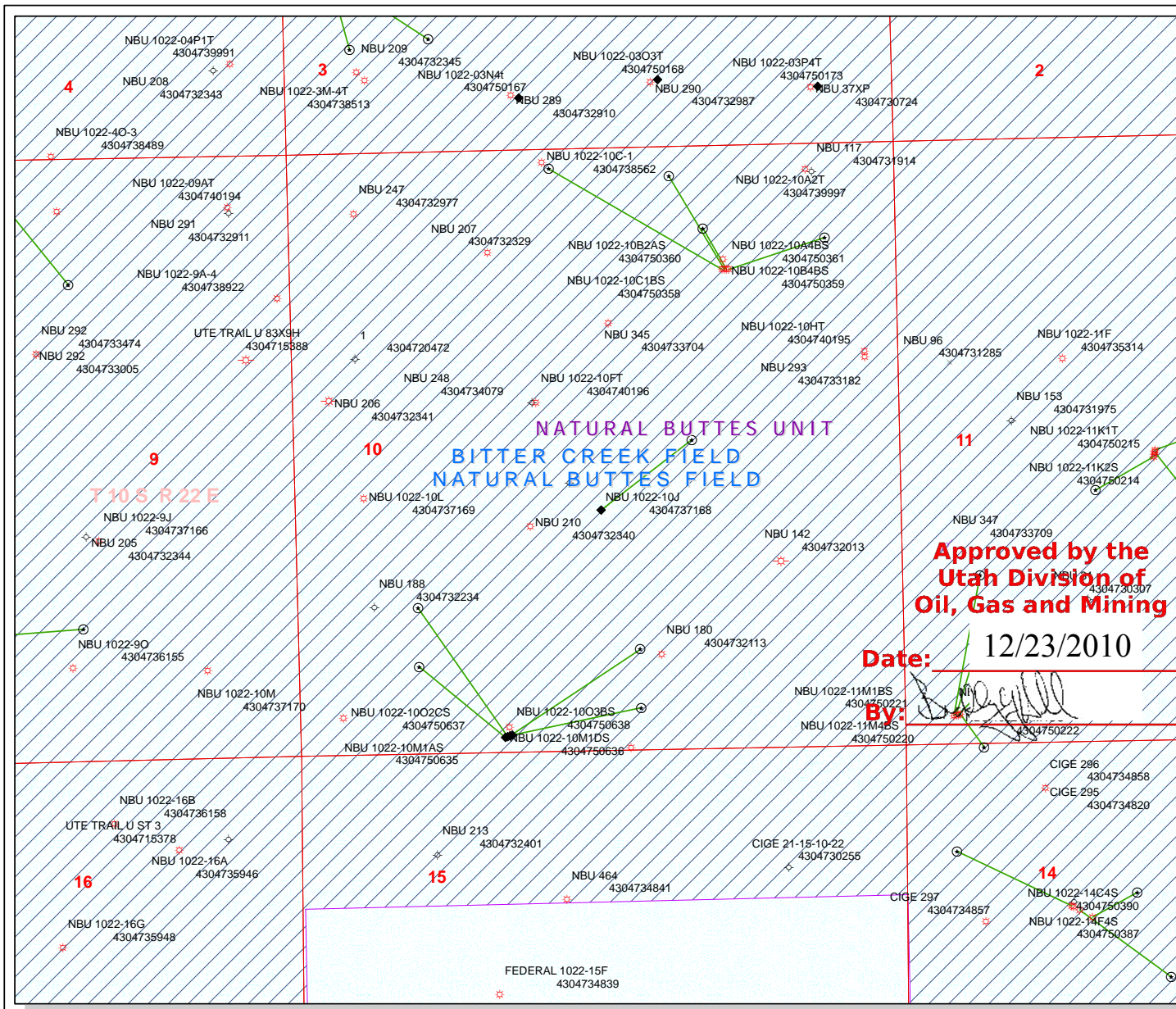
Kerr-McGee Oil & Gas Onshore, L.P. (Kerr-McGee) respectfully requests to change the well name for this location FROM: NBU 1022-10J TO: NBU 1022-10G4CS. Kerr-McGee additionally requests to change this location from a vertical well to a directional well. The bottom hole location will be changing FROM: NWSE 2,136' FSL & 2,620' FEL TO: SWNE 2,550' FNL & 1,816' FEL. Please see the attached revised plats, maps and drilling details for additional information. There will be no additional surface disturbance from the originally permitted APD. Please note that the operator shows the mineral lease number to be UTU025187. Please contact the undersigned with any questions and/or comments. Thank you.

Approved by the  
Utah Division of  
Oil, Gas and Mining

Date: 12/23/2010

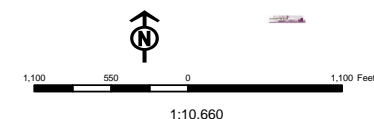
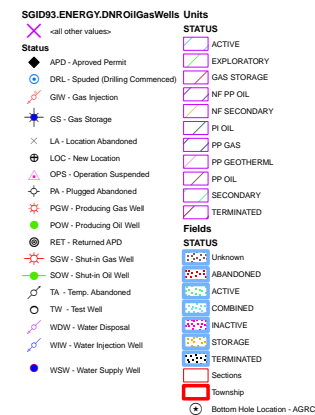
By:

<b>NAME (PLEASE PRINT)</b> Andy Lytle	<b>PHONE NUMBER</b> 720 929-6100	<b>TITLE</b> Regulatory Analyst
<b>SIGNATURE</b> N/A		<b>DATE</b> 12/16/2010

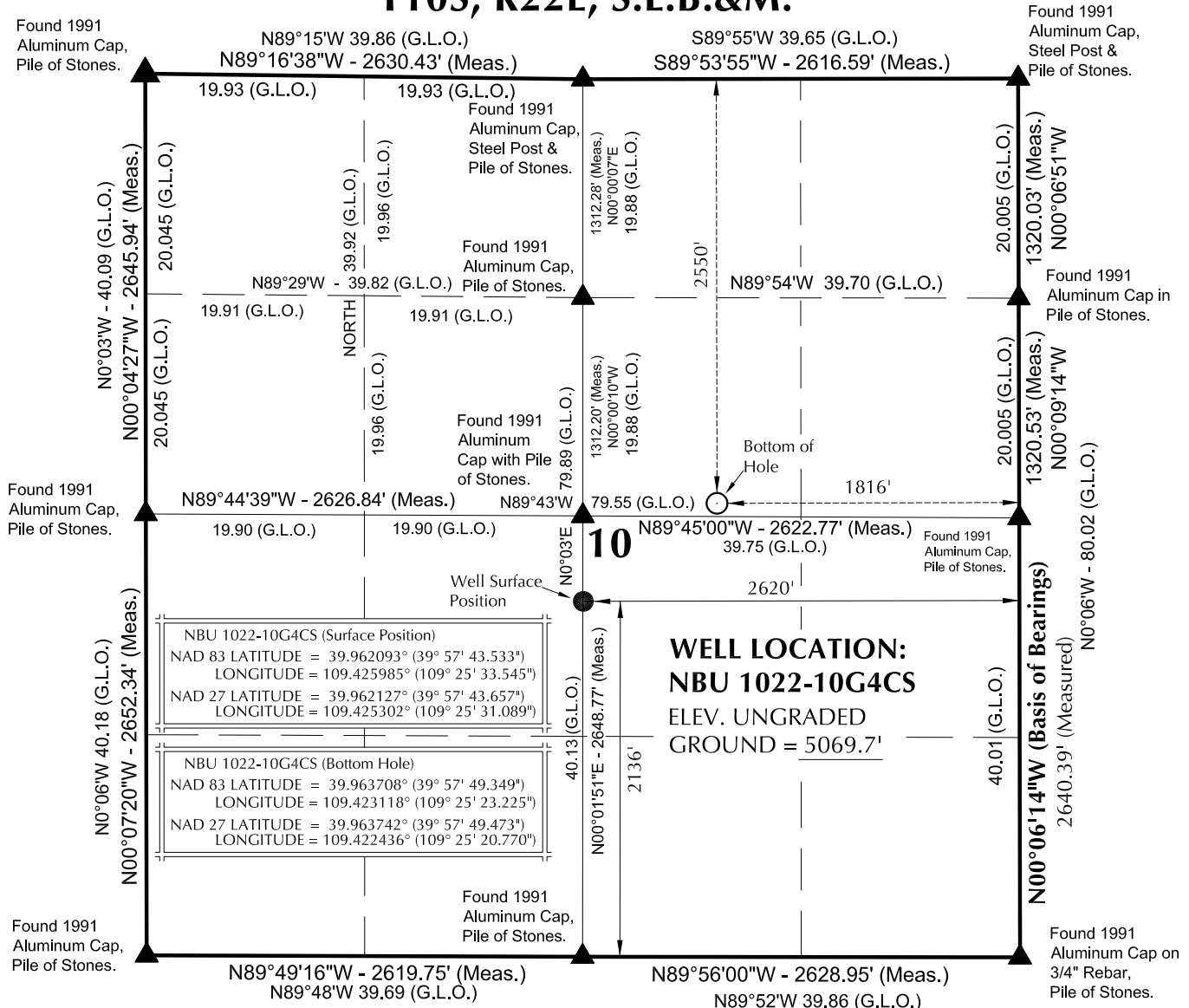


**API Number: 4304737168**  
**Well Name: NBU 1022-10J**  
**Township 10.0 S Range 22.0 E Section 10**  
**Meridian: SLBM**  
**Operator: KERR-MCGEE OIL & GAS ONSHO**

Map Prepared:  
 Map Produced by Diana Mason



**T10S, R22E, S.L.B.&M.**



NOTES:

- ▲ = Section Corners Located
1. Well footages are measured at right angles to the Section Lines.
  2. G.L.O. distances are shown in feet or chains.  
1 chain = 66 feet.
  3. The Bottom of hole bears N53°45'25"E 996.25' from the Surface Position.
  4. Bearings are based on Global Positioning Satellite observations.
  5. Basis of elevation is Tri-Sta "Two Water" located in the NW  $\frac{1}{4}$  of Section 1, T10S, R21E, S.L.B.&M. The elevation of this Tri-Sta is shown on the Big Pack Mtn NE 7.5 Min. Quadrangle as being 5238'.

**Kerr-McGee Oil & Gas Onshore, LP**  
1099 18th Street - Denver, Colorado 80202

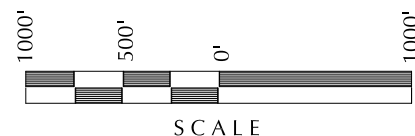
WELL PAD - NBU 1022-10J

**NBU 1022-10G4CS  
WELL PLAT**

2550' FNL, 1816' FEL (Bottom Hole)  
SW  $\frac{1}{4}$  NE  $\frac{1}{4}$  OF SECTION 10, T10S, R22E,  
S.L.B.&M., UTAH COUNTY, UTAH.



**CONSULTING, LLC**  
2155 North Main Street  
Sheridan WY 82801  
Phone 307-674-0609  
Fax 307-674-0182



## SURVEYOR'S CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED  
FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR  
UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE  
AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

No. 6028691  
JOHN R  
SLAUGH

*John R. Slauch*

PROFESSIONAL LAND SURVEYOR  
REGISTRATION No. 6028691  
STATE OF UTAH

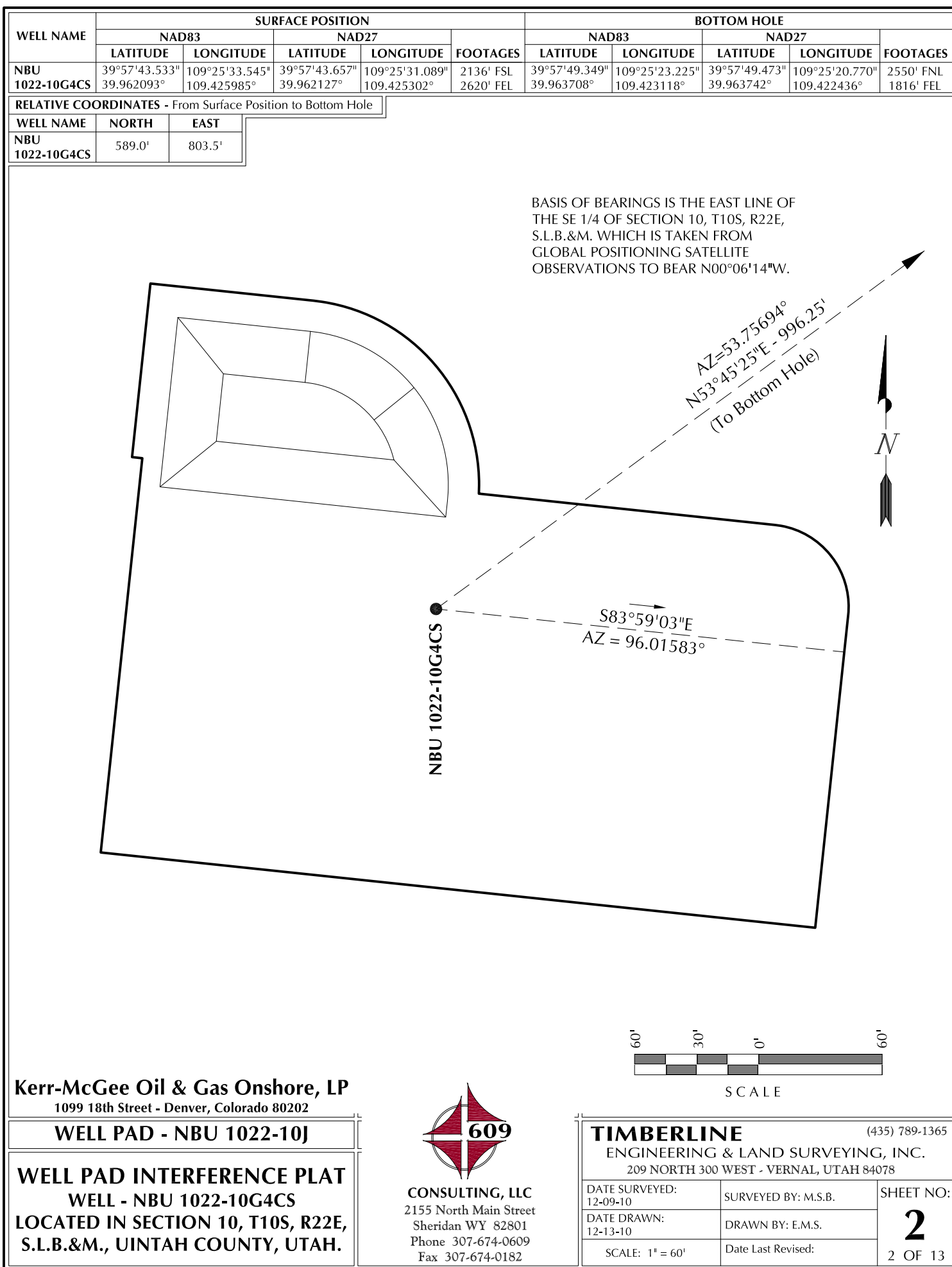
## TIMBERLINE

(435) 789-1365

ENGINEERING & LAND SURVEYING, INC.  
209 NORTH 300 WEST - VERNAL, UTAH 84078

DATE SURVEYED: 12-09-10	SURVEYED BY: M.S.B.	SHEET NO:  <b>1</b>  1 OF 13
DATE DRAWN: 12-13-10	DRAWN BY: E.M.S.	
SCALE: 1" = 1000'	Date Last Revised:	

RECEIVED December 16, 2010



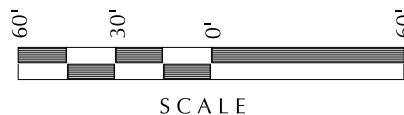
Kerr-McGee Oil & Gas Onshore, LP  
1099 18th Street - Denver, Colorado 80202

WELL PAD - NBU 1022-10J

WELL PAD INTERFERENCE PLAT  
WELL - NBU 1022-10G4CS  
LOCATED IN SECTION 10, T10S, R22E,  
S.L.B.&M., UTAH COUNTY, UTAH.



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SCALE

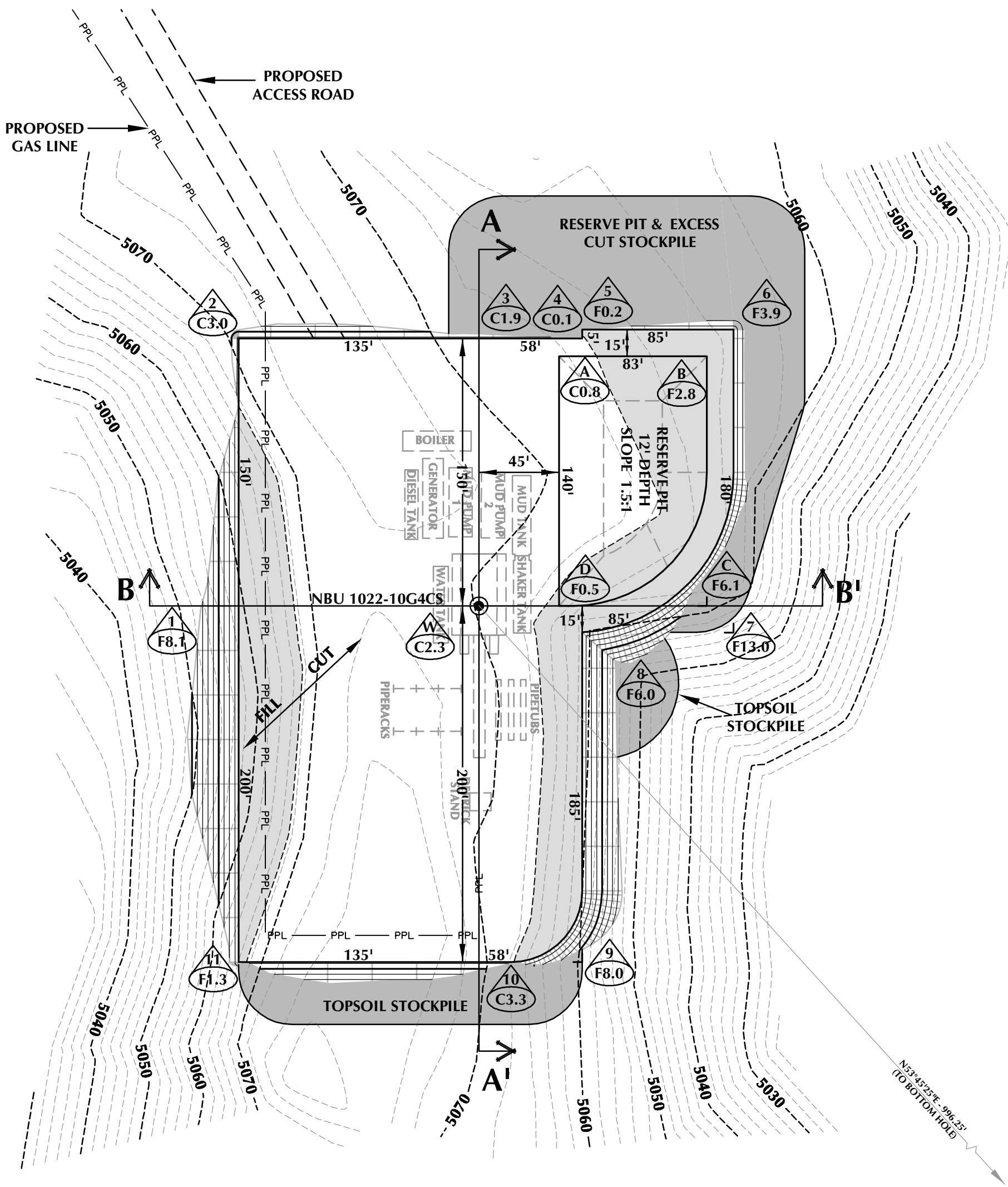
**TIMBERLINE**

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DATE SURVEYED: 12-09-10	SURVEYED BY: M.S.B.	SHEET NO:
DATE DRAWN: 12-13-10	DRAWN BY: E.M.S.	<b>2</b>
SCALE: 1" = 60'	Date Last Revised:	2 OF 13

RECEIVED December 16, 2010



PLEASE NOTE: LOCATIONS OF PROPOSED PIPELINES DISPLAYED WITHIN THE PAD AREA ARE FOR VISUALIZATION PURPOSES ONLY. ACTUAL LOCATIONS TO BE DETERMINED DURING CONSTRUCTION.

WELL PAD - NBU 1022-10J DESIGN SUMMARY

EXISTING GRADE @ CENTER OF WELL PAD = 5069.7'  
FINISHED GRADE ELEVATION = 5067.4'  
CUT SLOPES = 1.5:1  
FILL SLOPES = 1.5:1  
TOTAL WELL PAD AREA = 2.15 ACRES  
SHRINKAGE FACTOR = 1.10  
SWELL FACTOR = 1.00

WELL PAD QUANTITIES  
TOTAL CUT FOR WELL PAD = 6,760 C.Y.  
TOTAL FILL FOR WELL PAD = 4,713 C.Y.  
TOPSOIL @ 6" DEPTH = 1,730 C.Y.  
EXCESS MATERIAL = 2,047 C.Y.

RESERVE PIT QUANTITIES  
TOTAL CUT FOR RESERVE PIT +/- 3,160 C.Y.  
RESERVE PIT CAPACITY (2' OF FREEBOARD) +/- 11,690 BARRELS

Kerr-McGee Oil & Gas Onshore, LP  
1099 18th Street - Denver, Colorado 80202

WELL PAD - NBU 1022-10J

WELL PAD - LOCATION LAYOUT  
NBU 1022-10G4CS  
LOCATED IN SECTION 10, T10S, R22E,  
S.L.B.&M., UTAH COUNTY, UTAH



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Sheridan, WY 82801  
Phone 307-674-0609  
Fax 307-674-0182

TIMBERLINE  
ENGINEERING & LAND SURVEYING, INC.  
209 NORTH 300 WEST - VERNAL, UTAH 84078

(435) 789-1365

WELL PAD LEGEND

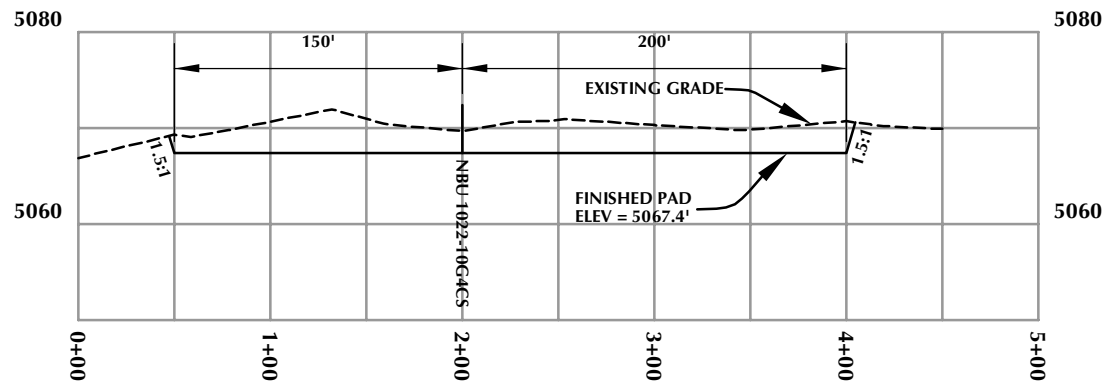
- EXISTING WELL LOCATION
- PROPOSED WELL LOCATION
- PROPOSED BOTTOM HOLE LOCATION
- EXISTING CONTOURS (2' INTERVAL)
- PROPOSED CONTOURS (2' INTERVAL)
- PPL - PROPOSED PIPELINE
- EPL - EXISTING PIPELINE



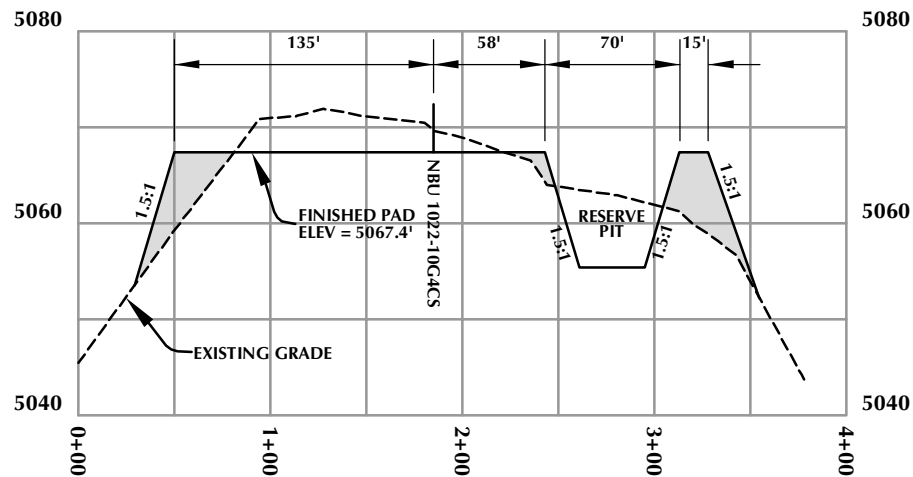
HORIZONTAL 0 30' 60' 1" = 60'  
2' CONTOURS

SCALE: 1"=60' DATE: 12/14/10 SHEET NO:

REVISED: 3 3 OF 13



**CROSS SECTION A-A'**



**CROSS SECTION B-B'**

NOTE: CROSS SECTION B-B' DEPICTS  
MAXIMUM RESERVE PIT DEPTH.

**Kerr-McGee Oil & Gas Onshore, LP**  
1099 18th Street - Denver, Colorado 80202

**WELL PAD - NBU 1022-10J**

**WELL PAD - CROSS SECTIONS**  
**NBU 1022-10G4CS**  
**LOCATED IN SECTION 10, T10S, R22E,**  
**S.L.B.&M., UINTAH COUNTY, UTAH**



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2155 North Main Street  
Sheridan, WY 82801  
Phone 307-674-0609  
Fax 307-674-0182

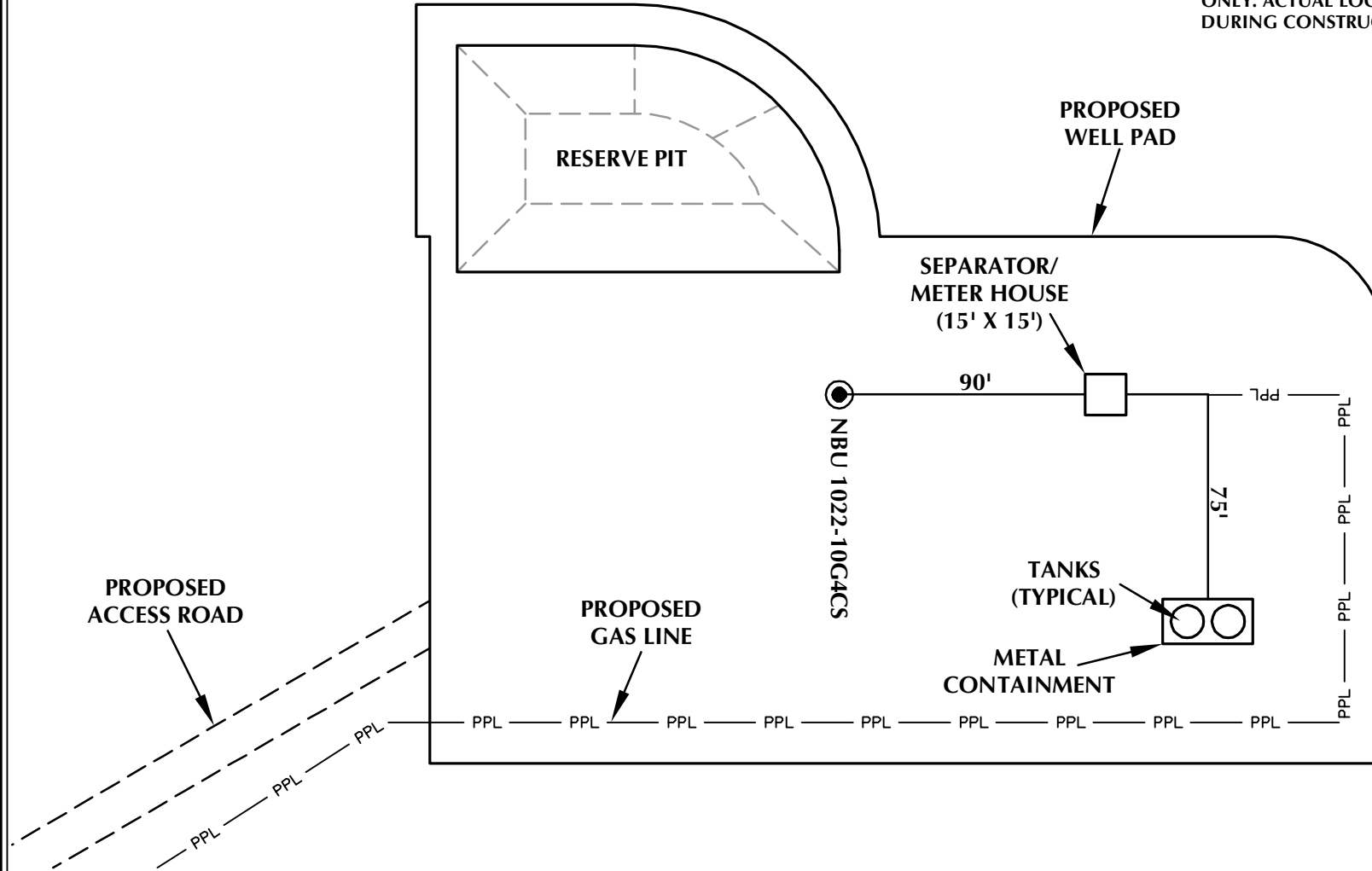
**TIMBERLINE**  
**ENGINEERING & LAND SURVEYING, INC.**  
209 NORTH 300 WEST - VERNAL, UTAH 84078

(435) 789-1365

**HORIZONTAL** 0 50' 100' 1" = 100'  
**VERTICAL** 0 10' 20' 1" = 20'

Scale: 1"=100'	Date: 12/14/10	SHEET NO:
REVISED:		<b>4</b> 4 OF 13

PLEASE NOTE: LOCATIONS OF FACILITIES AND PROPOSED PIPELINES DISPLAYED WITHIN THE PAD AREA ARE FOR VISUALIZATION PURPOSES ONLY. ACTUAL LOCATIONS TO BE DETERMINED DURING CONSTRUCTION.



**Kerr-McGee Oil & Gas Onshore, LP**  
1099 18th Street - Denver, Colorado 80202

**WELL PAD - NBU 1022-10J**

**WELL PAD - FACILITIES DIAGRAM**  
**NBU 1022-10G4CS**  
**LOCATED IN SECTION 10, T10S, R22E,**  
**S.L.B.&M., UINAH COUNTY, UTAH**



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2155 North Main Street  
Sheridan, WY 82801  
Phone 307-674-0609  
Fax 307-674-0182

#### WELL PAD LEGEND

- EXISTING WELL LOCATION
- PROPOSED WELL LOCATION
- PPL — PROPOSED PIPELINE
- EPL — EXISTING PIPELINE



HORIZONTAL 0 30' 60' 1" = 60'

**TIMBERLINE**  
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209 NORTH 300 WEST • VERNAL, UTAH 84078

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Scale: 1"=60'

Date: 12/14/10

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PHOTO VIEW: FROM PIT CORNER D TO LOCATION STAKE

CAMERA ANGLE: SOUTHWESTERLY



PHOTO VIEW: FROM BEGINNING OF PROPOSED ROAD

CAMERA ANGLE: NORTHEASTERLY

**Kerr-McGee Oil & Gas Onshore, LP**  
1099 18th Street - Denver, Colorado 80202

**WELL PAD - NBU 1022-10J**

**LOCATION PHOTOS**  
**NBU 1022-10G4CS**  
**LOCATED IN SECTION 10, T10S, R22E,**  
**S.L.B.&M., UINTAH COUNTY, UTAH.**



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2155 North Main Street  
Sheridan WY 82801  
Phone 307-674-0609  
Fax 307-674-0182

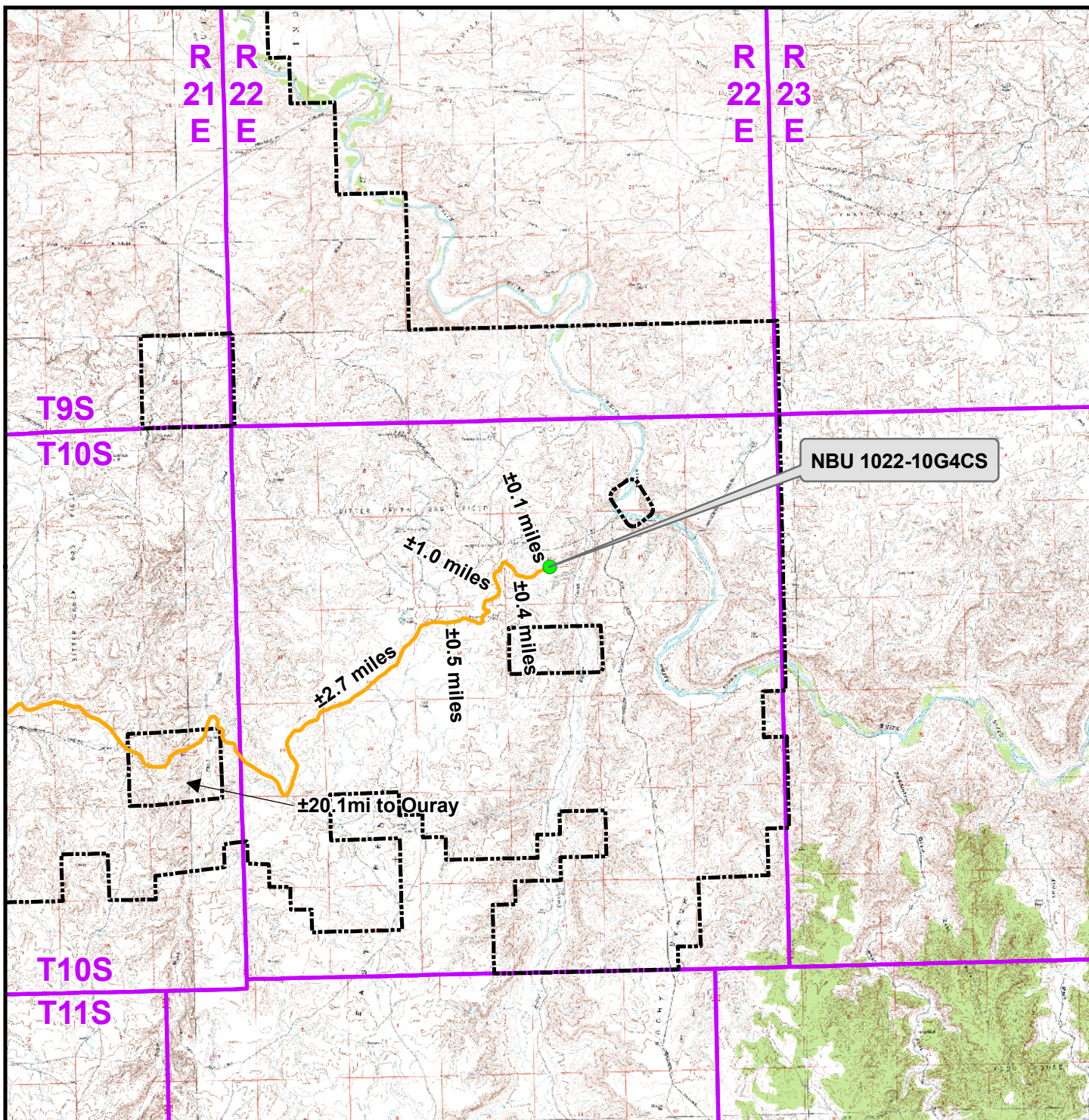
**TIMBERLINE**

(435) 789-1365

**ENGINEERING & LAND SURVEYING, INC.**  
209 NORTH 300 WEST - VERNAL, UTAH 84078

DATE PHOTOS TAKEN: 12-09-10	PHOTOS TAKEN BY: M.S.B.	SHEET NO:  <b>6</b> 6 OF 13
DATE DRAWN: 12-13-10	DRAWN BY: E.M.S.	
Date Last Revised:		

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NBU 1022-10G4CS

### Legend

- Proposed Well Location
- Natural Buttes Unit Boundary
- Access Route - Proposed

Distance From Well Pad - NBU 1022-10J To Unit Boundary: ±3,457ft

**Kerr-McGee Oil & Gas Onshore, LP**  
1099 18th Street, Denver, Colorado 80202

**WELL PAD - NBU 1022-10J**

**TOPO A**  
**NBU 1022-10G4CS**  
**LOCATED IN SECTION 10, T10S, R22E**  
**S.L.B.&M., UTAH COUNTY, UTAH**



**CONSULTING, LLC**  
2155 North Main Street  
Sheridan, WY 82801  
Phone (307) 674-0609  
Fax (307) 674-0182

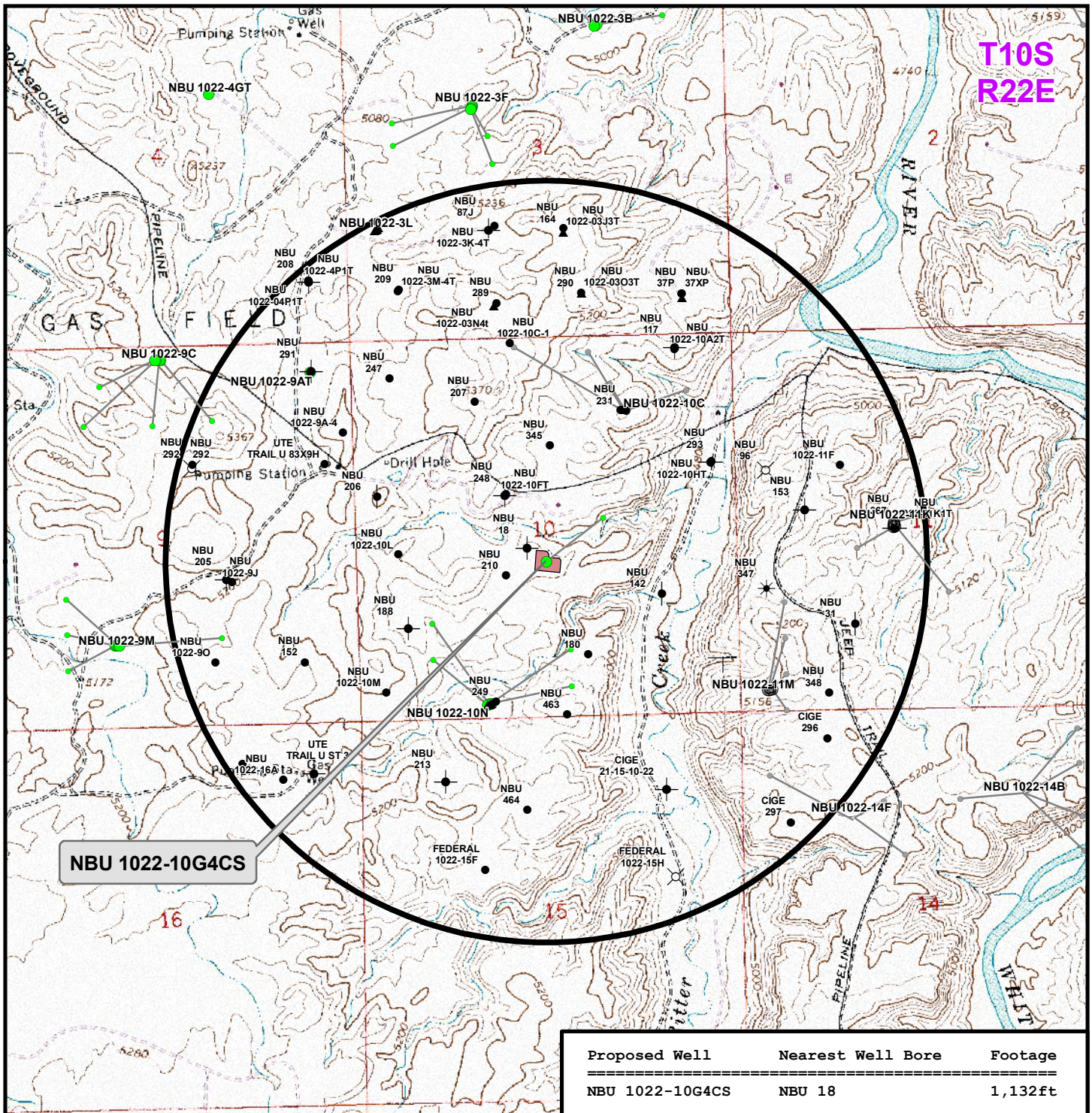


Scale: 1:100,000	NAD83 USP Central	Sheet No:
Drawn: TL	Date: 14 Dec 2010	7
Revised:	Date:	

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Proposed Well	Nearest Well Bore	Footage
NBU 1022-10G4CS	NBU 18	1,132ft

#### Legend

- Well - Proposed
- Bottom Hole - Proposed
- Well Pad
- Well Path
- Bottom Hole - Existing
- Well - 1 Mile Radius

Well locations derived from State of Utah, Dept. of Natural Resources, Division of Oil, Gas and Mining

- Producing
- ★ Active
- ⊙ Spudded (Drilling commenced; Not yet completed)
- ▲ Approved permit (APD); not yet spudded
- New Permit (Not yet approved or drilled)
- ⊕ Inactive
- ⊗ Drilling Operations Suspended
- Temporarily-Abandoned
- Shut-In
- Plugged and Abandoned
- ⊗ Location Abandoned
- ⊗ Dry hole marker, buried
- ⊗ Returned APD (Unapproved)

**Kerr-McGee Oil & Gas Onshore, LP**  
1099 18th Street, Denver, Colorado 80202

**WELL PAD - NBU 1022-10J**

**TOPO C**  
**NBU 1022-10G4CS**  
**LOCATED IN SECTION 10, T10S, R22E**  
**S.L.B.&M., UTAH COUNTY, UTAH**

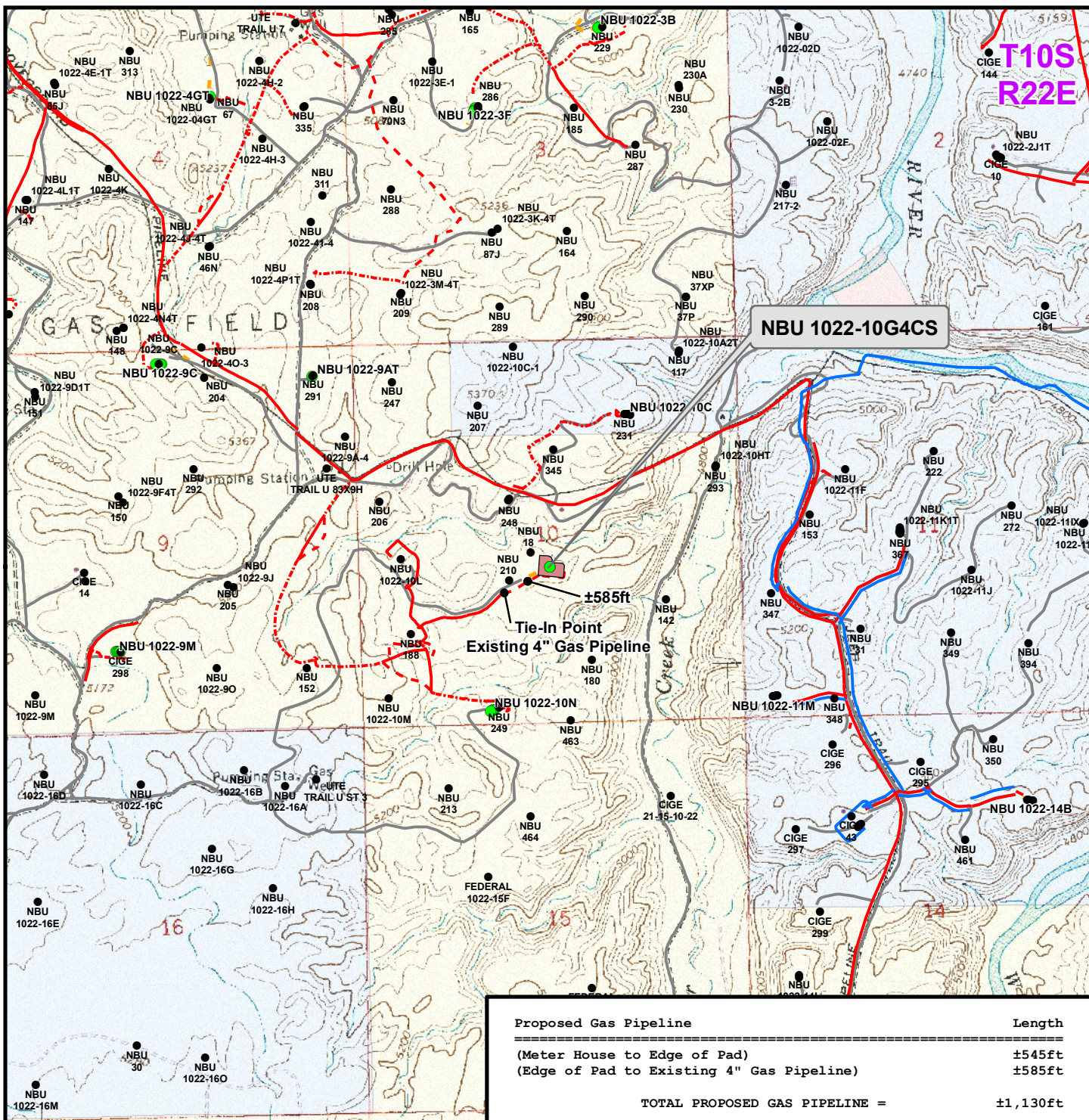
**609**  
**CONSULTING, LLC**  
2155 North Main Street  
Sheridan, WY 82801  
Phone (307) 674-0609  
Fax (307) 674-0182



Scale: 1" = 2,000ft | NAD83 USP Central  
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Sheet No:  
**9**  
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#### Legend

- Well - Proposed    ■ Well Pad    - - - Gas Pipeline - Proposed    - - - Liquid Pipeline - Proposed    - - - Road - Proposed    ■ Bureau of Land Management
- Well - Existing    - - - Gas Pipeline - To Be Upgraded    - - - Liquid Pipeline - Existing    - - - Road - Existing    ■ Indian Reservation
- - - Gas Pipeline - Existing    - - - State
- - - Private

**Kerr-McGee Oil & Gas Onshore, LP**  
1099 18th Street, Denver, Colorado 80202

**WELL PAD - NBU 1022-10J**

**TOPO D**  
**NBU 1022-10G4CS**  
**LOCATED IN SECTION 10, T10S, R22E**  
**S.L.B.&M., UINTAH COUNTY, UTAH**

**609**

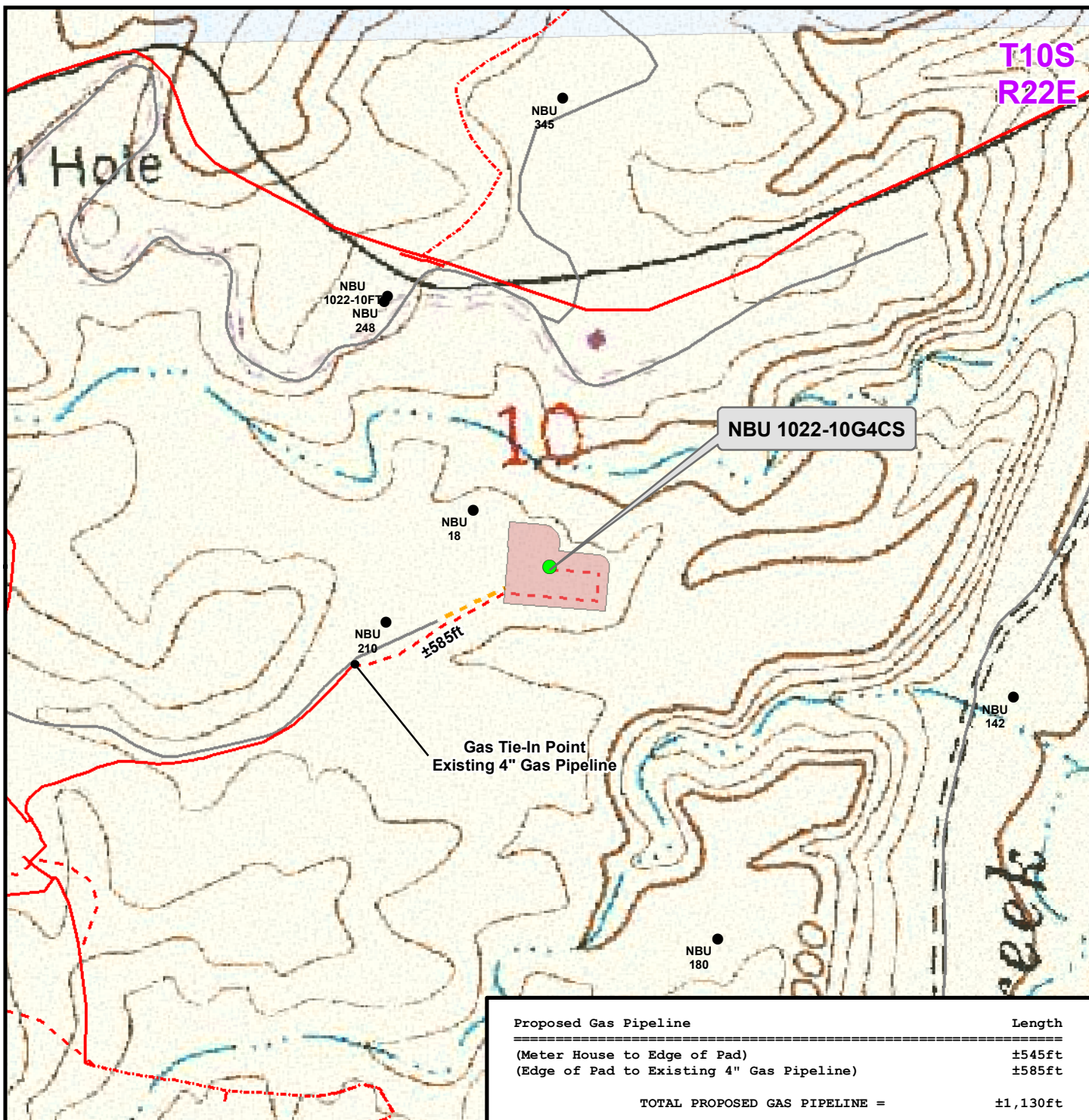
**CONSULTING, LLC**  
2155 North Main Street  
Sheridan, WY 82801  
Phone (307) 674-0609  
Fax (307) 674-0182



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Revised:    Date:

Sheet No:  
**10**  
10 of 13

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#### Legend

- Well - Proposed
- Well - Existing
- Well Pad
- Gas Pipeline - Proposed
- Gas Pipeline - To Be Upgraded
- Gas Pipeline - Existing
- Liquid Pipeline - Proposed
- Liquid Pipeline - Existing
- Road - Proposed
- Road - Existing
- Bureau of Land Management
- Indian Reservation
- State
- Private

**Kerr-McGee Oil & Gas Onshore, LP**  
1099 18th Street, Denver, Colorado 80202

**WELL PAD - NBU 1022-10J**

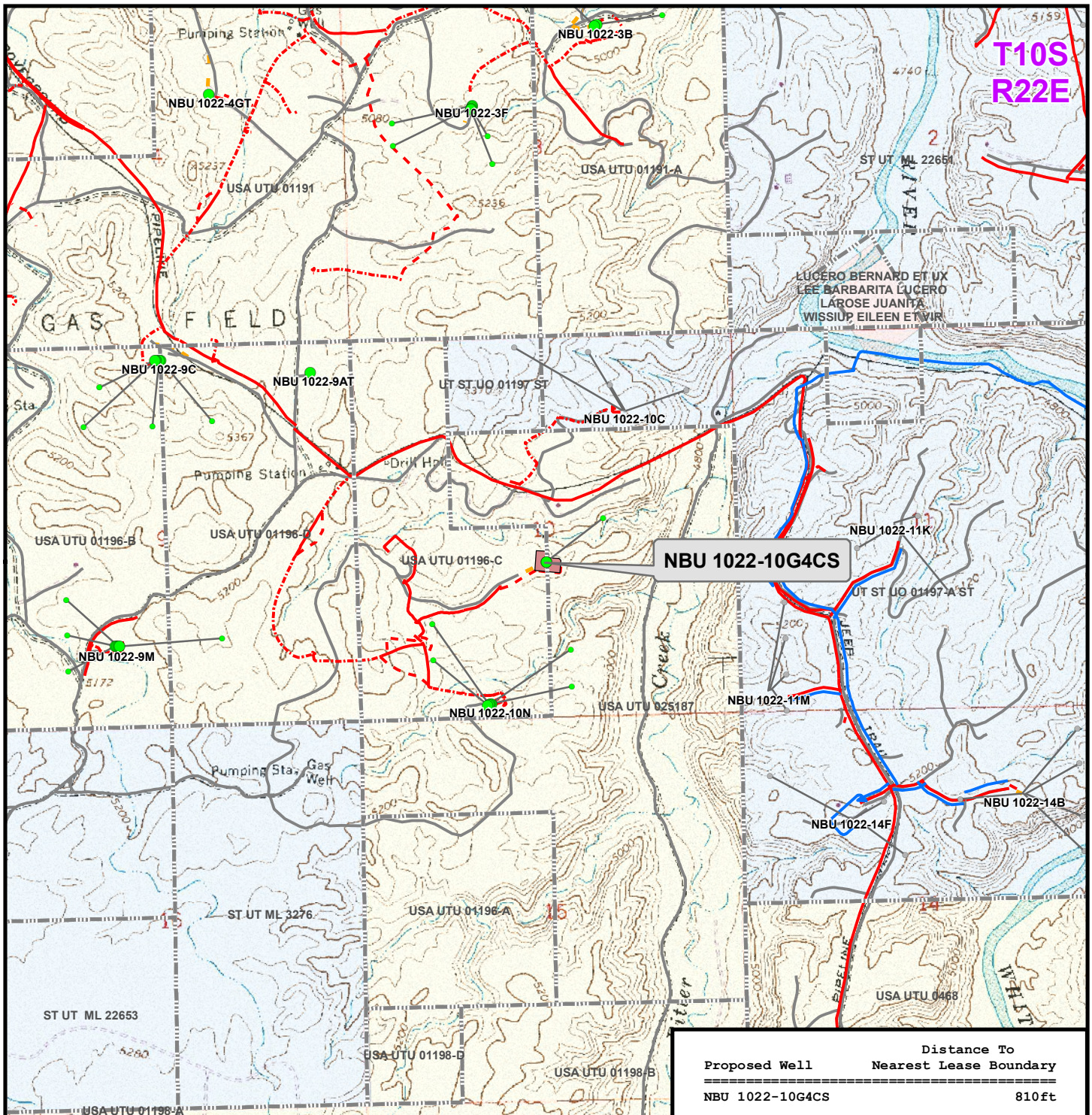
**TOPO D2 (PAD & PIPELINE DETAIL)**  
**NBU 1022-10G4CS**  
**LOCATED IN SECTION 10, T10S, R22E**  
**S.L.B.&M., UINTAH COUNTY, UTAH**



Scale: 1" = 500ft  
NAD83 USP Central  
Drawn: TL  
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Date: 14 Dec 2010  
Date:

Sheet No:  
**11**  
11 of 13

**RECEIVED** December 16, 2010



#### Legend

- Well - Proposed
- Bottom Hole - Proposed
- Bottom Hole - Existing
- Well Path
- Well Pad
- Lease Boundary
- Gas Pipeline - Proposed
- Gas Pipeline - To Be Upgraded
- Gas Pipeline - Existing
- Liquid Pipeline - Proposed
- Liquid Pipeline - Existing
- Road - Proposed
- Road - Existing
- Bureau of Land Management
- Indian Reservation
- State
- Private

**Kerr-McGee Oil & Gas Onshore, LP**  
1099 18th Street, Denver, Colorado 80202

**WELL PAD - NBU 1022-10J**

**TOPO E**  
**NBU 1022-10G4CS**  
**LOCATED IN SECTION 10, T10S, R22E**  
**S.L.B.&M., UTAH COUNTY, UTAH**

**609**  
**CONSULTING, LLC**  
2155 North Main Street  
Sheridan, WY 82801  
Phone (307) 674-0609  
Fax (307) 674-0182



**Scale: 1" = 2,000ft** **NAD83 USP Central**  
**Drawn: CPS** **Date: 14 Dec 2010**  
**Revised:** **Date:**

**Sheet No:**  
**12** 12 of 13

**RECEIVED** December 16, 2010

**Kerr-McGee Oil & Gas Onshore, LP**  
**WELL PAD - NBU 1022-10J**  
**WELL – NBU 1022-10G4CS**  
**Section 10, T10S, R22E, S.L.B.&M.**

From the intersection of U.S. Highway 40 and 500 East Street in Vernal, Utah, proceed in a westerly direction along U.S. Highway 40 approximately 14.0 miles to the junction of State Highway 88. Exit right and proceed in a southerly direction along State Highway 88 approximately 17.0 miles to Ouray, Utah. Proceed in a southerly, then southeasterly direction along the Seep Ridge Road approximately 11.2 miles to an existing road to the east. Exit left and proceed in an easterly, then southeasterly direction along the existing road approximately 8.9 miles to a second existing road to the northeast. Exit left and proceed in a northeasterly direction along the second existing road approximately 2.7 miles to a third existing road to the east. Exit right and proceed in an easterly direction along the third existing road approximately 0.5 miles to a fourth existing road to the northeast. Exit left and proceed in a northeasterly, then southeasterly direction along the fourth existing road approximately 1.0 miles to a fifth existing road to the southeast. Exit left and proceed in a southeasterly, then northeasterly direction along the fifth existing road approximately 0.4 miles to the NBU 210 well pad. Continue through the NBU 210 well pad approximately 305 feet in a northeasterly direction to the proposed access road. Follow the road flags in a northeasterly direction approximately 255 feet to the proposed well location.

Total distance from Vernal, Utah to the proposed well location is approximately 55.8 miles in a southerly direction.

**NBU 1022-10G4CS**

Surface: 2136' FSL 2,620' FEL (NW/4SE/4)

BHL: 2,550' FNL 1,816' FEL (SW/4NE/4)

Sec. 10 T10S R22E

Uintah, Utah

Mineral Lease: UTU 025187

**ONSHORE ORDER NO. 1**

***DRILLING PROGRAM***

1. – 2. **Estimated Tops of Important Geologic Markers:**  
**Estimated Depths of Anticipated Water, Oil, Gas, or Mineral Formations:**

<u>Formation</u>	<u>Depth</u>	<u>Resource</u>
Uinta	0 – Surface	
Green River	987'	
Birds Nest	1,290'	Water
Mahogany	1,659'	Water
Wasatch	4,097'	Gas
Mesaverde	6,418'	Gas
MVU2	7,373'	Gas
MVL1	8,007'	Gas
TVD	8,570'	
TD	8,728'	

3. **Pressure Control Equipment** (Schematic Attached)

*Please refer to the attached Drilling Program.*

4. **Proposed Casing & Cementing Program:**

*Please refer to the attached Drilling Program.*

5. **Drilling Fluids Program:**

*Please refer to the attached Drilling Program.*

6. **Evaluation Program:**

*Please refer to the attached Drilling Program.*

**7. Abnormal Conditions:**

Maximum anticipated bottomhole pressure calculated at 8,570' TVD, approximately equals 5,028 psi (calculated at 0.59 psi/foot).

Maximum anticipated surface pressure equals approximately 3,142 psi (bottomhole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot).

**8. Anticipated Starting Dates:**

*Drilling is planned to commence immediately upon approval of this application.*

**9. Variances:**

*Please refer to the attached Drilling Program.*

*Onshore Order #2 – Air Drilling Variance*

*Kerr-McGee Oil & Gas Onshore LP (KMG) respectfully requests a variance to several requirements associated with air drilling outlined in Onshore Order 2*

- *Blowout Prevention Equipment (BOPE) requirements;*
- *Mud program requirements; and*
- *Special drilling operation (surface equipment placement) requirements associated with air drilling.*

*This Standard Operating Practices addendum provides supporting information as to why KMG current air drilling practices for constructing the surface casing hole should be granted a variance to Onshore Order 2 air drilling requirements.*

*The reader should note that the air rig is used only to construct a stable surface casing hole through a historically difficult lost circulation zone. A conventional rotary rig follows the air rig, and is used to drill and construct the majority of the wellbore.*

*More notable, KMG has used the air rig layout and procedures outlined below to drill the surface casing hole in approximately 675 wells without incident of blow out or loss of life.*

***Background***

*In a typical well, KMG utilizes an air rig for drilling the surface casing hole, an interval from the surface to surface casing depths, which varies in depth from 1,700 to 2,800 feet. The air rig drilling operation does not drill through productive or over pressured formations in KMG field, but does penetrate the Uinta and Green River Formations. The purpose of the air drilling operation is to overcome the severe loss circulation zone in the Green River known as the Bird's Nest while creating a stable hole for the surface casing. The surface casing hole is generally drilled to approximately 500 feet below the Bird's Nest.*

*Before the surface air rig is mobilized, a rathole rig is utilized to set and cement conductor pipe through a competent surface formation. Generally, the conductor is set at 40 feet. In some cases, conductor may be set deeper in areas that the surface formation is not found competent. This rig also drills the rat and mouse holes in preparation for the surface casing and production string drilling operations.*

*The air rig is then mobilized to drill the surface casing hole by drilling a 11 inch hole to just above the Bird's Nest interval with an air hammer. The hammer is then tripped and replaced with a 11 inch tri-cone bit. The tri-cone bit is used to drill to the surface casing point, approximately 500 feet below the loss circulation zone (Bird's Nest). The 8-5/8 inch surface casing is then run and cemented in place, thereby isolating the lost circulation zone.*

*KMG fully appreciates Onshore Order 2 well control and safety requirements associated with a typical air drilling operations. However, the requirements of Onshore Order 2 are excessive with respect to the air rig layout and drilling operation procedures that are currently in practice to drill and control the surface casing hole in KMG Fields.*

***Variance for BOPE Requirements***

*The air rig operation utilizes a properly lubricated and maintained air bowl diverter system which diverts the drilling returns to a six-inch blooie line. The air bowl is the only piece of BOPE equipment which is installed during drilling operations and is sufficient to contain the air returns associated with this drilling operation. As was discussed earlier, the drilling of the surface hole does not encounter any over pressured or productive zones, and as a result standard BOPE equipment should not be required. In addition, standard drilling practices do not support the use of BOPE on 40 feet of conductor pipe.*

***Variance for Mud Material Requirements***

*Onshore Order 2 also states that sufficient quantities of mud materials shall be maintained or readily accessible for the purpose of assuring adequate well control. Once again, the surface hole drilling operations does not encounter over pressured or productive intervals, and as a result there is not a need to control pressure in the surface hole with a mud system. Instead of mud, the air rigs utilize water from the reserve pit for well control, if necessary. A skid pump which is located near the reserve pit (see attachment) will supply the water to the well bore.*

***Variance for Special Drilling Operation (surface equipment placement) Requirements***

*Onshore Order 2 requires specific safety distances or setbacks for the placement of associated standard air drilling equipment, wellbore, and reserve pits. The air rigs used to drill the surface holes are not typical of an air rig used to drill a producing hole in other parts of the US. These are smaller in nature and designed to fit a KMG location. The typical air rig layout for drilling surface hole in the field is attached.*

*Typically the blooie line discharge point is required to be 100 feet from the well bore. In the case of a KMG well, the reserve pit is only 45 feet from the rig and is used for the drill cuttings. The blooie line, which transports the drill cuttings from the well to the reserve pit, subsequently discharges only 45 feet from the well bore.*

*Typically the air rig compressors are required to be located in the opposite direction from the blooie line and a minimum of 100 feet from the well bore. At the KMG locations, the air rig compressors are approximately 40 feet from the well bore and approximately 60 feet from the blooie line discharge due to the unique air rig design. The air compressors (see attachment) are located on the rig (1250 cfm) and on a standby trailer (1170 cfm). A booster sits between the two compressors and boosts the output from 350 psi to 2000 psi. The design does put the booster and standby compressor opposite from the blooie line.*

*Lastly, Onshore Order 2 addresses the need for an automatic igniter or continuous pilot light on the blooie line. The air rig does not utilize an igniter as the surface hole drilling operation does not encounter productive formations.*

***Variance for FIT Requirements***

*KMG also respectfully requests a variance to Onshore Order 2, Section III, Part Bi, for the pressure integrity test (PIT, also known as a formation integrity test (FIT)). The air rig operation utilizes a 5M BOPE when drilling. This well is not an exploratory well and is being drilled in an area where the formation integrity is well known. Additionally, when an FIT is run with the mud weight as required, the casing shoe frequently breaks down and causes subsequent lost circulation when drilling the entire depth of the well.*

***Conclusion***

*The air rig operating procedures and the attached air rig layout have effectively maintained well control while drilling the surface holes in KMG Fields. KMG respectfully requests a variance from Onshore Order 2 with respect to air drilling well control requirements as discussed above.*

**10. Other Information:**

*Please refer to the attached Drilling Program.*

**KERR-McGEE OIL & GAS ONSHORE LP**  
**DRILLING PROGRAM**

COMPANY NAME	KERR-McGEE OIL & GAS ONSHORE LP				DATE	December 16, 2010	
WELL NAME	NBU 1022-10G4CS				TD	8,570'	8,728' MD
FIELD	Natural Buttes	COUNTY	Utah	STATE	Utah	FINISHED ELEVATION	5,067'
SURFACE LOCATION	NWSE	2136' FSL	2620' FEL	Sec 10	T 10S	R 22E	
	Latitude:	39.962093	Longitude:	-109.425985			NAD 83
BTM HOLE LOCATION	SWNE	2550' FNL	1816' FEL	Sec 10	T 10S	R 22E	
	Latitude:	39.963708	Longitude:	-109.423118			NAD 83
OBJECTIVE ZONE(S)	Wasatch/Mesaverde						
ADDITIONAL INFO	Regulatory Agencies: BLM (Minerals), BLM (Surface), UDOGM Tri-County Health Dept.						

GEOLOGICAL			MECHANICAL		
LOGS	FORMATION	DEPTH	HOLE SIZE	CASING SIZE	MUD WEIGHT
		40'		14"	
			11"	8-5/8", 28#, IJ-55, LTC	Air mist
<p>All water flows encountered while drilling will be reported to the appropriate agencies.</p>					
	Green River @	0,987'			
	Top of Birds Nest @	1,290'			
	Mahogany @	1,659'			
	Preset f/ GL @	2,110'			
	MD				
<p>Note: 11" surface hole will usually be drilled ±400' below the lost circulation zone (aka bird's nest). Drilled depth may be ±200' of the estimated set depth depending on the actual depth of the loss zone.</p>					
	Wasatch @	4,097'			
<p>Mud logging program TBD Cased hole logging program from TD - surf csg</p>					
			7-7/8"	4-1/2" 11.6# I-80 or equivalent BTC csg	Water / Fresh Water Mud 8.3-11.5 ppg
	Mverde @	6,418' TVD			
	MVU2 @	7,373' TVD			
	MVU1 @	8,007' TVD			
<p>Max anticipated Mud required</p>					
		8,570' TVD			
	TD @	8,728' MD			



# KERR-McGEE OIL & GAS ONSHORE LP

## DRILLING PROGRAM

### CASING PROGRAM

	SIZE	INTERVAL	WT.	GR.	CPLG.	DESIGN FACTORS		
						BURST	COLLAPSE	TENSION
CONDUCTOR	14"	0-40'				3,390	1,880	348,000
SURFACE	8-5/8"	0 to 2,110	28.00	IJ-55	LTC	1.05	1.90	5.83
						7,780	6,350	278,000
PRODUCTION	4-1/2"	0 to 8,728	11.60	I-80	BTC	2.40	1.24	3.20

\*Burst on surface casing is controlled by fracture gradient as shoe with gas gradient above.

D.F. = 2.55

1) Max Anticipated Surf. Press.(MASP) (Surface Casing) = (Pore Pressure at next csg point-(0.22 psi/ft-partial evac gradient x TVD of next csg point))

2) MASP (Prod Casing) = Pore Pressure at TD - (0.22 psi/ft-partial evac gradient x TD)

(Burst Assumptions: TD = 11.5 ppg)

0.22 psi/ft = gradient for partially evac wellbore

(Collapse Assumption: Fully Evacuated Casing, Max MW)

(Tension Assumptions: Air Weight of Casing\*Buoy.Fact. of water)

**MASP 3,142 psi**

3) Maximum Anticipated Bottom Hole Pressure (MABHP) = Pore Pressure at TD

(Burst Assumptions: TD = 11.5 ppg)

0.59 psi/ft = bottomhole gradient

(Collapse Assumption: Fully Evacuated Casing, Max MW)

(Tension Assumptions: Air Weight of Casing\*Buoy.Fact. of water)

**MABHP 5,028 psi**

### CEMENT PROGRAM

		FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT	YIELD
SURFACE	LEAD	500'	Premium cmt + 2% CaCl	180	60%	15.80	1.15
Option 1			+ 0.25 pps flocele				
	TOP OUT CMT (6 jobs)	1,200'	20 gals sodium silicate + Premium cmt	270	0%	15.80	1.15
			+ 2% CaCl + 0.25 pps flocele				
SURFACE		<b>NOTE: If well will circulate water to surface, option 2 will be utilized</b>					
Option 2	LEAD	1,610'	65/35 Poz + 6% Gel + 10 pps gilsonite	150	35%	11.00	3.82
			+ 0.25 pps Flocele + 3% salt BWOW				
	TAIL	500'	Premium cmt + 2% CaCl	150	35%	15.80	1.15
			+ 0.25 pps flocele				
	TOP OUT CMT	as required	Premium cmt + 2% CaCl	as req.		15.80	1.15
PRODUCTION	LEAD	3,588'	Premium Lite II +0.25 pps	260	10%	11.00	3.38
			celloflake + 5 pps gilsonite + 10% gel				
			+ 0.5% extender				
	TAIL	5,140'	50/50 Poz/G + 10% salt + 2% gel	990	10%	14.30	1.31
			+ 0.1% R-3				

\*Substitute caliper hole volume plus 0% excess for LEAD if accurate caliper is obtained

\*Substitute caliper hole volume plus 10% excess for TAIL if accurate caliper is obtained

### FLOAT EQUIPMENT & CENTRALIZERS

SURFACE	Guide shoe, 1 jt, insert float. Centralize first 3 joints with bow spring centralizers. Thread lock guide shoe
PRODUCTION	Float shoe, 1 jt, float collar. No centralizers will be used.

### ADDITIONAL INFORMATION

Test casing head to 750 psi after installing. Test surface casing to 1,500 psi prior to drilling out.

BOPE: 11" 5M with one annular and 2 rams. The BOPE will be installed before the production hole is drilled and tested to 5,000 psi (annular to 2,500 psi) prior to drilling out the surface casing shoe. Record on chart recorder and tour sheet. Function test rams on each trip. Maintain safety valve and inside BOP on rig floor at all times. Most rigs have top drives; however, if used, the Kelly is to be equipped with upper and lower kelly valves.

Surveys will be taken at 1,000' minimum intervals.

Most rigs have PVT System for mud monitoring. If no PVT is available, visual monitoring will be utilized.

DRILLING ENGINEER:

John Huycke / Emile Goodwin

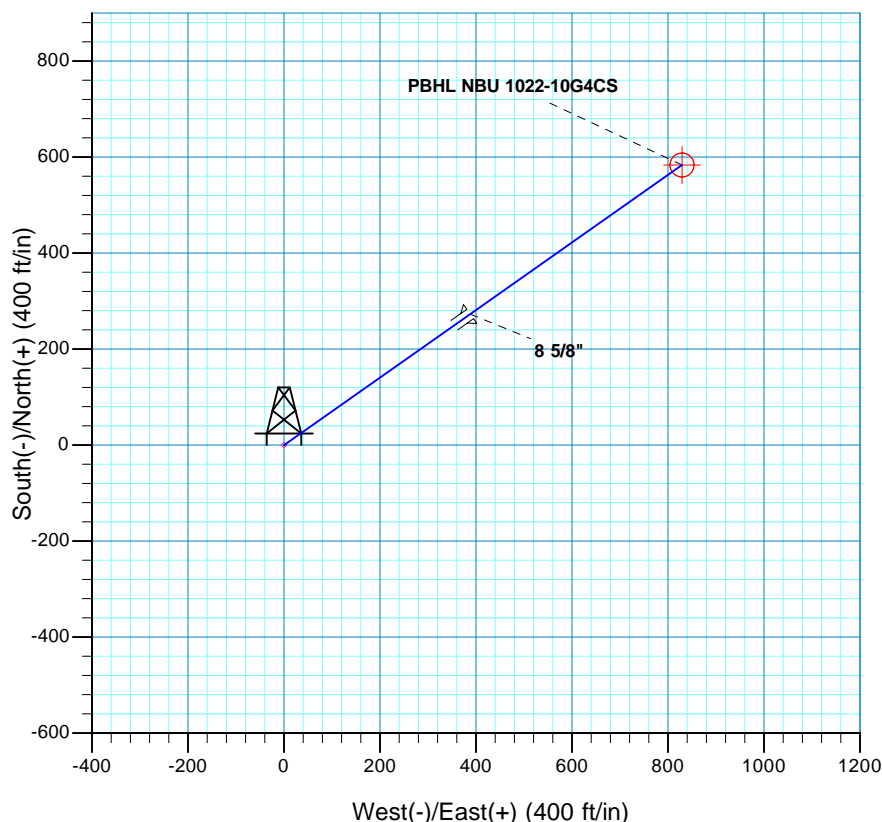
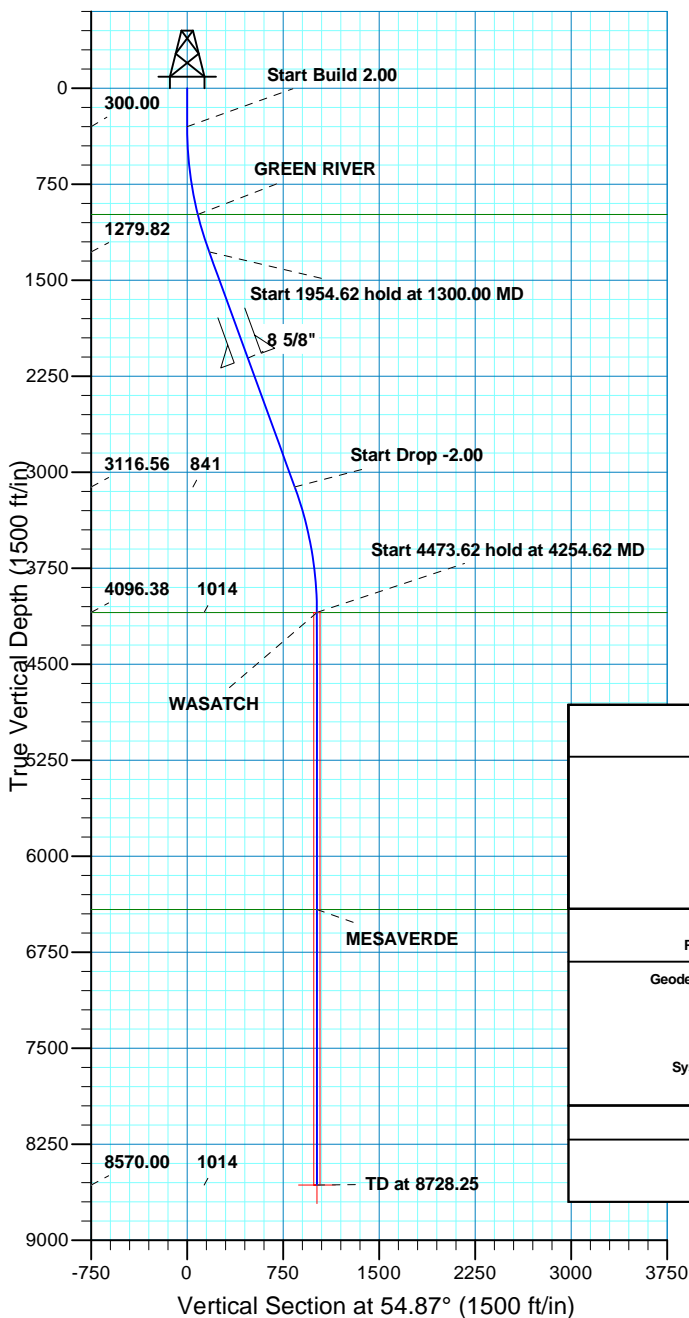
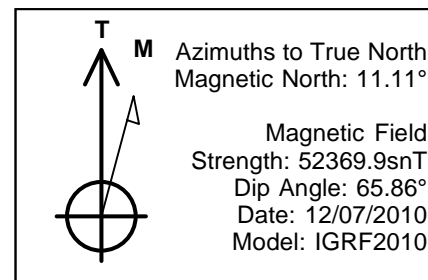
DATE:

DRILLING SUPERINTENDENT:

John Merkel / Lovel Young

DATE:

WELL DETAILS: P_NBU 1022-10G4CS						
GL 5069' & RKB 4' @ 5073.00ft (ASSUMED)						
	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
	0.00	0.00	14516148.00	2081677.03	39° 57' 43.650 N	109° 25' 31.091 W
DESIGN TARGET DETAILS						
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude
PBHL	8570.00	583.52	829.35	14516746.07	2082495.94	39° 57' 49.418 N
- plan hits target center						
					Longitude	Shape
					109° 25' 20.438 W	Circle (Radius: 25.00)



SECTION DETAILS									
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	
1300.00	20.00	54.87	1279.82	99.42	141.30	2.00	54.87	172.77	
3254.62	20.00	54.87	3116.56	484.10	688.05	0.00	0.00	841.29	
4254.62	0.00	0.00	4096.38	583.52	829.35	2.00	180.00	1014.06	
8728.25	0.00	0.00	8570.00	583.52	829.35	0.00	0.00	1014.06	PBHL NBU 1022-10G4CS
PROJECT DETAILS: UTAH - UTM (feet), NAD27, Zone 12N							FORMATION TOP DETAILS		
Geodetic System: Universal Transverse Mercator (US Survey Feet) Datum: NAD 1927 (NADCON CONUS) Ellipsoid: Clarke 1866 Zone: Zone 12N (114 W to 108 W) Location: SECTION 10 T10S R22E System Datum: Mean Sea Level							TVDPath	MDPath	Formation
							987.00	993.76	GREEN RIVER
							4097.00	4255.25	WASATCH
							6418.00	6576.25	MESAVERDE
CASING DETAILS									
TVD		MD		Name		Size			
2109.00		2182.40		8 5/8"		8.625			

# **US ROCKIES REGION PLANNING**

UTAH - UTM (feet), NAD27, Zone 12N

UINTAH\_NBU 1022-10G4CS

P\_NBU 1022-10G4CS

P\_NBU 1022-10G4CS

Plan: PLAN #1 12-7-10 RHS

## **Standard Planning Report**

08 December, 2010

<b>Database:</b>	EDM5000-RobertS-Local	<b>Local Co-ordinate Reference:</b>	Well P_NBU 1022-10G4CS
<b>Company:</b>	US ROCKIES REGION PLANNING	<b>TVD Reference:</b>	GL 5069' & RKB 4' @ 5073.00ft (ASSUMED)
<b>Project:</b>	UTAH - UTM (feet), NAD27, Zone 12N	<b>MD Reference:</b>	GL 5069' & RKB 4' @ 5073.00ft (ASSUMED)
<b>Site:</b>	UINTAH_NBU 1022-10G4CS	<b>North Reference:</b>	True
<b>Well:</b>	P_NBU 1022-10G4CS	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	P_NBU 1022-10G4CS		
<b>Design:</b>	PLAN #1 12-7-10 RHS		

<b>Project</b>	UTAH - UTM (feet), NAD27, Zone 12N		
<b>Map System:</b>	Universal Transverse Mercator (US Survey Feet)	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	NAD 1927 (NADCON CONUS)		
<b>Map Zone:</b>	Zone 12N (114 W to 108 W)		

<b>Site</b>	UINTAH_NBU 1022-10G4CS, SECTION 10 T10S R22E			
<b>Site Position:</b>		<b>Northing:</b>	14,516,148.00 usft	<b>Latitude:</b> 39° 57' 43.650 N
<b>From:</b>	Lat/Long	<b>Easting:</b>	2,081,677.02 usft	<b>Longitude:</b> 109° 25' 31.091 W
<b>Position Uncertainty:</b>	0.00 ft	<b>Slot Radius:</b>	13.200 in	<b>Grid Convergence:</b> 1.01 °

<b>Well</b>	P_NBU 1022-10G4CS			
<b>Well Position</b>	<b>+N/-S</b>	0.00 ft	<b>Northing:</b>	14,516,148.00 usft
	<b>+E/-W</b>	0.00 ft	<b>Easting:</b>	2,081,677.02 usft
<b>Position Uncertainty</b>		0.00 ft	<b>Wellhead Elevation:</b>	<b>Ground Level:</b> 5,069.00 ft

<b>Wellbore</b>	P_NBU 1022-10G4CS				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2010	12/07/2010	11.10	65.86	52,370

<b>Design</b>	PLAN #1 12-7-10 RHS			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PLAN	<b>Tie On Depth:</b>	0.00
<b>Vertical Section:</b>	<b>Depth From (TVD) (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>
	0.00	0.00	0.00	54.87

<b>Plan Sections</b>										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,300.00	20.00	54.87	1,279.82	99.42	141.30	2.00	2.00	0.00	54.87	
3,254.62	20.00	54.87	3,116.56	484.10	688.05	0.00	0.00	0.00	0.00	
4,254.62	0.00	0.00	4,096.38	583.52	829.35	2.00	-2.00	0.00	180.00	
8,728.25	0.00	0.00	8,570.00	583.52	829.35	0.00	0.00	0.00	0.00	PBHL NBU 1022-10G

<b>Database:</b>	EDM5000-RobertS-Local	<b>Local Co-ordinate Reference:</b>	Well P_NBU 1022-10G4CS
<b>Company:</b>	US ROCKIES REGION PLANNING	<b>TVD Reference:</b>	GL 5069' & RKB 4' @ 5073.00ft (ASSUMED)
<b>Project:</b>	UTAH - UTM (feet), NAD27, Zone 12N	<b>MD Reference:</b>	GL 5069' & RKB 4' @ 5073.00ft (ASSUMED)
<b>Site:</b>	UINTAH_NBU 1022-10G4CS	<b>North Reference:</b>	True
<b>Well:</b>	P_NBU 1022-10G4CS	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	P_NBU 1022-10G4CS		
<b>Design:</b>	PLAN #1 12-7-10 RHS		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Start Build 2.00</b>									
400.00	2.00	54.87	399.98	1.00	1.43	1.75	2.00	2.00	0.00
500.00	4.00	54.87	499.84	4.02	5.71	6.98	2.00	2.00	0.00
600.00	6.00	54.87	599.45	9.03	12.84	15.69	2.00	2.00	0.00
700.00	8.00	54.87	698.70	16.04	22.80	27.88	2.00	2.00	0.00
800.00	10.00	54.87	797.47	25.04	35.59	43.52	2.00	2.00	0.00
900.00	12.00	54.87	895.62	36.02	51.20	62.60	2.00	2.00	0.00
993.76	13.88	54.87	987.00	48.10	68.37	83.59	2.00	2.00	0.00
<b>GREEN RIVER</b>									
1,000.00	14.00	54.87	993.06	48.97	69.60	85.10	2.00	2.00	0.00
1,100.00	16.00	54.87	1,089.64	63.86	90.76	110.98	2.00	2.00	0.00
1,200.00	18.00	54.87	1,185.27	80.68	114.67	140.21	2.00	2.00	0.00
1,300.00	20.00	54.87	1,279.82	99.42	141.30	172.77	2.00	2.00	0.00
<b>Start 1954.62 hold at 1300.00 MD</b>									
1,400.00	20.00	54.87	1,373.78	119.10	169.27	206.97	0.00	0.00	0.00
1,500.00	20.00	54.87	1,467.75	138.78	197.24	241.17	0.00	0.00	0.00
1,600.00	20.00	54.87	1,561.72	158.46	225.21	275.37	0.00	0.00	0.00
1,700.00	20.00	54.87	1,655.69	178.14	253.19	309.58	0.00	0.00	0.00
1,800.00	20.00	54.87	1,749.66	197.82	281.16	343.78	0.00	0.00	0.00
1,900.00	20.00	54.87	1,843.63	217.50	309.13	377.98	0.00	0.00	0.00
2,000.00	20.00	54.87	1,937.60	237.18	337.10	412.18	0.00	0.00	0.00
2,100.00	20.00	54.87	2,031.57	256.86	365.08	446.38	0.00	0.00	0.00
2,182.40	20.00	54.87	2,109.00	273.08	388.12	474.57	0.00	0.00	0.00
<b>8 5/8"</b>									
2,200.00	20.00	54.87	2,125.54	276.54	393.05	480.59	0.00	0.00	0.00
2,300.00	20.00	54.87	2,219.51	296.23	421.02	514.79	0.00	0.00	0.00
2,400.00	20.00	54.87	2,313.48	315.91	448.99	548.99	0.00	0.00	0.00
2,500.00	20.00	54.87	2,407.45	335.59	476.96	583.19	0.00	0.00	0.00
2,600.00	20.00	54.87	2,501.42	355.27	504.94	617.39	0.00	0.00	0.00
2,700.00	20.00	54.87	2,595.39	374.95	532.91	651.60	0.00	0.00	0.00
2,800.00	20.00	54.87	2,689.35	394.63	560.88	685.80	0.00	0.00	0.00
2,900.00	20.00	54.87	2,783.32	414.31	588.85	720.00	0.00	0.00	0.00
3,000.00	20.00	54.87	2,877.29	433.99	616.82	754.20	0.00	0.00	0.00
3,100.00	20.00	54.87	2,971.26	453.67	644.80	788.40	0.00	0.00	0.00
3,200.00	20.00	54.87	3,065.23	473.35	672.77	822.61	0.00	0.00	0.00
3,254.62	20.00	54.87	3,116.56	484.10	688.05	841.29	0.00	0.00	0.00
<b>Start Drop -2.00</b>									
3,300.00	19.09	54.87	3,159.32	492.84	700.46	856.47	2.00	-2.00	0.00
3,400.00	17.09	54.87	3,254.37	510.71	725.86	887.52	2.00	-2.00	0.00
3,500.00	15.09	54.87	3,350.45	526.66	748.53	915.24	2.00	-2.00	0.00
3,600.00	13.09	54.87	3,447.43	540.67	768.44	939.59	2.00	-2.00	0.00
3,700.00	11.09	54.87	3,545.21	552.72	785.57	960.54	2.00	-2.00	0.00
3,800.00	9.09	54.87	3,643.66	562.81	799.91	978.06	2.00	-2.00	0.00
3,900.00	7.09	54.87	3,742.66	570.91	811.42	992.14	2.00	-2.00	0.00
4,000.00	5.09	54.87	3,842.09	577.01	820.10	1,002.75	2.00	-2.00	0.00
4,100.00	3.09	54.87	3,941.83	581.12	825.93	1,009.88	2.00	-2.00	0.00
4,200.00	1.09	54.87	4,041.76	583.22	828.92	1,013.54	2.00	-2.00	0.00
4,254.62	0.00	0.00	4,096.38	583.52	829.35	1,014.06	2.00	-2.00	0.00
<b>Start 4473.62 hold at 4254.62 MD</b>									

<b>Database:</b>	EDM5000-RobertS-Local	<b>Local Co-ordinate Reference:</b>	Well P_NBU 1022-10G4CS
<b>Company:</b>	US ROCKIES REGION PLANNING	<b>TVD Reference:</b>	GL 5069' & RKB 4' @ 5073.00ft (ASSUMED)
<b>Project:</b>	UTAH - UTM (feet), NAD27, Zone 12N	<b>MD Reference:</b>	GL 5069' & RKB 4' @ 5073.00ft (ASSUMED)
<b>Site:</b>	UINTAH_NBU 1022-10G4CS	<b>North Reference:</b>	True
<b>Well:</b>	P_NBU 1022-10G4CS	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	P_NBU 1022-10G4CS		
<b>Design:</b>	PLAN #1 12-7-10 RHS		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
4,255.25	0.00	0.00	4,097.00	583.52	829.35	1,014.06	0.00	0.00	0.00
<b>WASATCH</b>									
4,300.00	0.00	0.00	4,141.75	583.52	829.35	1,014.06	0.00	0.00	0.00
4,400.00	0.00	0.00	4,241.75	583.52	829.35	1,014.06	0.00	0.00	0.00
4,500.00	0.00	0.00	4,341.75	583.52	829.35	1,014.06	0.00	0.00	0.00
4,600.00	0.00	0.00	4,441.75	583.52	829.35	1,014.06	0.00	0.00	0.00
4,700.00	0.00	0.00	4,541.75	583.52	829.35	1,014.06	0.00	0.00	0.00
4,800.00	0.00	0.00	4,641.75	583.52	829.35	1,014.06	0.00	0.00	0.00
4,900.00	0.00	0.00	4,741.75	583.52	829.35	1,014.06	0.00	0.00	0.00
5,000.00	0.00	0.00	4,841.75	583.52	829.35	1,014.06	0.00	0.00	0.00
5,100.00	0.00	0.00	4,941.75	583.52	829.35	1,014.06	0.00	0.00	0.00
5,200.00	0.00	0.00	5,041.75	583.52	829.35	1,014.06	0.00	0.00	0.00
5,300.00	0.00	0.00	5,141.75	583.52	829.35	1,014.06	0.00	0.00	0.00
5,400.00	0.00	0.00	5,241.75	583.52	829.35	1,014.06	0.00	0.00	0.00
5,500.00	0.00	0.00	5,341.75	583.52	829.35	1,014.06	0.00	0.00	0.00
5,600.00	0.00	0.00	5,441.75	583.52	829.35	1,014.06	0.00	0.00	0.00
5,700.00	0.00	0.00	5,541.75	583.52	829.35	1,014.06	0.00	0.00	0.00
5,800.00	0.00	0.00	5,641.75	583.52	829.35	1,014.06	0.00	0.00	0.00
5,900.00	0.00	0.00	5,741.75	583.52	829.35	1,014.06	0.00	0.00	0.00
6,000.00	0.00	0.00	5,841.75	583.52	829.35	1,014.06	0.00	0.00	0.00
6,100.00	0.00	0.00	5,941.75	583.52	829.35	1,014.06	0.00	0.00	0.00
6,200.00	0.00	0.00	6,041.75	583.52	829.35	1,014.06	0.00	0.00	0.00
6,300.00	0.00	0.00	6,141.75	583.52	829.35	1,014.06	0.00	0.00	0.00
6,400.00	0.00	0.00	6,241.75	583.52	829.35	1,014.06	0.00	0.00	0.00
6,500.00	0.00	0.00	6,341.75	583.52	829.35	1,014.06	0.00	0.00	0.00
6,576.25	0.00	0.00	6,418.00	583.52	829.35	1,014.06	0.00	0.00	0.00
<b>MESAVERDE</b>									
6,600.00	0.00	0.00	6,441.75	583.52	829.35	1,014.06	0.00	0.00	0.00
6,700.00	0.00	0.00	6,541.75	583.52	829.35	1,014.06	0.00	0.00	0.00
6,800.00	0.00	0.00	6,641.75	583.52	829.35	1,014.06	0.00	0.00	0.00
6,900.00	0.00	0.00	6,741.75	583.52	829.35	1,014.06	0.00	0.00	0.00
7,000.00	0.00	0.00	6,841.75	583.52	829.35	1,014.06	0.00	0.00	0.00
7,100.00	0.00	0.00	6,941.75	583.52	829.35	1,014.06	0.00	0.00	0.00
7,200.00	0.00	0.00	7,041.75	583.52	829.35	1,014.06	0.00	0.00	0.00
7,300.00	0.00	0.00	7,141.75	583.52	829.35	1,014.06	0.00	0.00	0.00
7,400.00	0.00	0.00	7,241.75	583.52	829.35	1,014.06	0.00	0.00	0.00
7,500.00	0.00	0.00	7,341.75	583.52	829.35	1,014.06	0.00	0.00	0.00
7,600.00	0.00	0.00	7,441.75	583.52	829.35	1,014.06	0.00	0.00	0.00
7,700.00	0.00	0.00	7,541.75	583.52	829.35	1,014.06	0.00	0.00	0.00
7,800.00	0.00	0.00	7,641.75	583.52	829.35	1,014.06	0.00	0.00	0.00
7,900.00	0.00	0.00	7,741.75	583.52	829.35	1,014.06	0.00	0.00	0.00
8,000.00	0.00	0.00	7,841.75	583.52	829.35	1,014.06	0.00	0.00	0.00
8,100.00	0.00	0.00	7,941.75	583.52	829.35	1,014.06	0.00	0.00	0.00
8,200.00	0.00	0.00	8,041.75	583.52	829.35	1,014.06	0.00	0.00	0.00
8,300.00	0.00	0.00	8,141.75	583.52	829.35	1,014.06	0.00	0.00	0.00
8,400.00	0.00	0.00	8,241.75	583.52	829.35	1,014.06	0.00	0.00	0.00
8,500.00	0.00	0.00	8,341.75	583.52	829.35	1,014.06	0.00	0.00	0.00
8,600.00	0.00	0.00	8,441.75	583.52	829.35	1,014.06	0.00	0.00	0.00
8,700.00	0.00	0.00	8,541.75	583.52	829.35	1,014.06	0.00	0.00	0.00
8,728.25	0.00	0.00	8,570.00	583.52	829.35	1,014.06	0.00	0.00	0.00
<b>TD at 8728.25 - PBHL NBU 1022-10G4CS</b>									

<b>Database:</b>	EDM5000-RobertS-Local	<b>Local Co-ordinate Reference:</b>	Well P_NBU 1022-10G4CS
<b>Company:</b>	US ROCKIES REGION PLANNING	<b>TVD Reference:</b>	GL 5069' & RKB 4' @ 5073.00ft (ASSUMED)
<b>Project:</b>	UTAH - UTM (feet), NAD27, Zone 12N	<b>MD Reference:</b>	GL 5069' & RKB 4' @ 5073.00ft (ASSUMED)
<b>Site:</b>	UINTAH_NBU 1022-10G4CS	<b>North Reference:</b>	True
<b>Well:</b>	P_NBU 1022-10G4CS	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	P_NBU 1022-10G4CS		
<b>Design:</b>	PLAN #1 12-7-10 RHS		

Design Targets									
Target Name									
- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- Shape	(°)	(°)	(ft)	(ft)	(ft)	(usft)	(usft)		
PBHL NBU 1022-10G4C	0.00	0.00	8,570.00	583.52	829.35	14,516,746.07	2,082,495.94	39° 57' 49.418 N	109° 25' 20.438 W
- plan hits target center									
- Circle (radius 25.00)									

Casing Points					
Measured Depth	Vertical Depth			Casing Diameter	Hole Diameter
(ft)	(ft)			(in)	(in)
		Name			
2,182.40	2,109.00	8 5/8"		8.625	11.000

Formations					
Measured Depth	Vertical Depth			Dip	Dip Direction
(ft)	(ft)			(°)	(°)
		Name		Lithology	
993.76	987.00	GREEN RIVER			
4,255.25	4,097.00	WASATCH			
6,576.25	6,418.00	MESAVERDE			

Plan Annotations				
Measured Depth	Vertical Depth	Local Coordinates		
(ft)	(ft)	+N/-S	+E/-W	Comment
(ft)	(ft)	(ft)	(ft)	
300.00	300.00	0.00	0.00	Start Build 2.00
1,300.00	1,279.82	99.42	141.30	Start 1954.62 hold at 1300.00 MD
3,254.62	3,116.56	484.10	688.05	Start Drop -2.00
4,254.62	4,096.38	583.52	829.35	Start 4473.62 hold at 4254.62 MD
8,728.25	8,570.00	583.52	829.35	TD at 8728.25

## **US ROCKIES REGION PLANNING**

UTAH - UTM (feet), NAD27, Zone 12N

UINTAH\_NBU 1022-10G4CS

P\_NBU 1022-10G4CS

P\_NBU 1022-10G4CS

Plan: PLAN #1 12-7-10 RHS

## **Survey Report - Geographic**

08 December, 2010

<b>Company:</b>	US ROCKIES REGION PLANNING	<b>Local Co-ordinate Reference:</b>	Well P_NBU 1022-10G4CS
<b>Project:</b>	UTAH - UTM (feet), NAD27, Zone 12N	<b>TVD Reference:</b>	GL 5069' & RKB 4' @ 5073.00ft (ASSUMED)
<b>Site:</b>	UINTAH_NBU 1022-10G4CS	<b>MD Reference:</b>	GL 5069' & RKB 4' @ 5073.00ft (ASSUMED)
<b>Well:</b>	P_NBU 1022-10G4CS	<b>North Reference:</b>	True
<b>Wellbore:</b>	P_NBU 1022-10G4CS	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	PLAN #1 12-7-10 RHS	<b>Database:</b>	EDM5000-RobertS-Local

<b>Project</b>	UTAH - UTM (feet), NAD27, Zone 12N		
<b>Map System:</b>	Universal Transverse Mercator (US Survey Feet)	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	NAD 1927 (NADCON CONUS)		
<b>Map Zone:</b>	Zone 12N (114 W to 108 W)		

Site		UINTAH_NBU 1022-10G4CS, SECTION 10 T10S R22E			
Site Position:		Northing:	14,516,148.00 usft	Latitude:	39° 57' 43.650 N
From:	Lat/Long	Easting:	2,081,677.02 usft	Longitude:	109° 25' 31.091 W
Position Uncertainty:	0.00 ft	Slot Radius:	13.200 in	Grid Convergence:	1.01 °

Well		P_NBU 1022-10G4CS				
Well Position	+N/-S	0.00 ft	Northing:	14,516,148.00 usft	Latitude:	39° 57' 43.650 N
	+E/-W	0.00 ft	Easting:	2,081,677.02 usft	Longitude:	109° 25' 31.091 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level:	5,069.00 ft

<b>Wellbore</b>	P_NBU 1022-10G4CS				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2010	12/07/2010	11.10	65.86	52,370

<b>Design</b>	PLAN #1 12-7-10 RHS				
<b>Audit Notes:</b>					
<b>Version:</b>	<b>Phase:</b>	PLAN	<b>Tie On Depth:</b>	0.00	
<b>Vertical Section:</b>	<b>Depth From (TVD) (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>	
	0.00	0.00	0.00	54.87	

<b>Survey Tool Program</b>	<b>Date</b>	12/07/2010			
<b>From (ft)</b>	<b>To (ft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>	
0.00	8,728.25	PLAN #1 12-7-10 RHS (P_NBU 1022-10G	SDI MWD	SDI MWD - Standard ver 1.0.1	

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
0.00	0.00	0.00	0.00	0.00	0.00	14,516,148.00	2,081,677.02	39° 57' 43.650 N	109° 25' 31.091 W
100.00	0.00	0.00	100.00	0.00	0.00	14,516,148.00	2,081,677.02	39° 57' 43.650 N	109° 25' 31.091 W
200.00	0.00	0.00	200.00	0.00	0.00	14,516,148.00	2,081,677.02	39° 57' 43.650 N	109° 25' 31.091 W
300.00	0.00	0.00	300.00	0.00	0.00	14,516,148.00	2,081,677.02	39° 57' 43.650 N	109° 25' 31.091 W
Start Build 2.00									
400.00	2.00	54.87	399.98	1.00	1.43	14,516,149.03	2,081,678.43	39° 57' 43.660 N	109° 25' 31.072 W
500.00	4.00	54.87	499.84	4.02	5.71	14,516,152.12	2,081,682.66	39° 57' 43.690 N	109° 25' 31.017 W
600.00	6.00	54.87	599.45	9.03	12.84	14,516,157.26	2,081,689.70	39° 57' 43.739 N	109° 25' 30.926 W
700.00	8.00	54.87	698.70	16.04	22.80	14,516,164.45	2,081,699.54	39° 57' 43.809 N	109° 25' 30.798 W
800.00	10.00	54.87	797.47	25.04	35.59	14,516,173.67	2,081,712.17	39° 57' 43.898 N	109° 25' 30.634 W
900.00	12.00	54.87	895.62	36.02	51.20	14,516,184.92	2,081,727.58	39° 57' 44.006 N	109° 25' 30.433 W

<b>Company:</b>	US ROCKIES REGION PLANNING	<b>Local Co-ordinate Reference:</b>	Well P_NBU 1022-10G4CS
<b>Project:</b>	UTAH - UTM (feet), NAD27, Zone 12N	<b>TVD Reference:</b>	GL 5069' & RKB 4' @ 5073.00ft (ASSUMED)
<b>Site:</b>	UINTAH_NBU 1022-10G4CS	<b>MD Reference:</b>	GL 5069' & RKB 4' @ 5073.00ft (ASSUMED)
<b>Well:</b>	P_NBU 1022-10G4CS	<b>North Reference:</b>	True
<b>Wellbore:</b>	P_NBU 1022-10G4CS	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	PLAN #1 12-7-10 RHS	<b>Database:</b>	EDM5000-RobertS-Local

#### Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
993.76	13.88	54.87	987.00	48.10	68.37	14,516,197.30	2,081,744.53	39° 57' 44.125 N	109° 25' 30.213 W
<b>GREEN RIVER</b>									
1,000.00	14.00	54.87	993.06	48.97	69.60	14,516,198.19	2,081,745.75	39° 57' 44.134 N	109° 25' 30.197 W
1,100.00	16.00	54.87	1,089.64	63.86	90.76	14,516,213.45	2,081,766.65	39° 57' 44.281 N	109° 25' 29.925 W
1,200.00	18.00	54.87	1,185.27	80.68	114.67	14,516,230.70	2,081,790.26	39° 57' 44.447 N	109° 25' 29.618 W
1,300.00	20.00	54.87	1,279.82	99.42	141.30	14,516,249.90	2,081,816.55	39° 57' 44.633 N	109° 25' 29.276 W
<b>Start 1954.62 hold at 1300.00 MD</b>									
1,400.00	20.00	54.87	1,373.78	119.10	169.27	14,516,270.07	2,081,844.17	39° 57' 44.827 N	109° 25' 28.917 W
1,500.00	20.00	54.87	1,467.75	138.78	197.24	14,516,290.24	2,081,871.79	39° 57' 45.022 N	109° 25' 28.557 W
1,600.00	20.00	54.87	1,561.72	158.46	225.21	14,516,310.41	2,081,899.41	39° 57' 45.216 N	109° 25' 28.198 W
1,700.00	20.00	54.87	1,655.69	178.14	253.19	14,516,330.58	2,081,927.03	39° 57' 45.411 N	109° 25' 27.839 W
1,800.00	20.00	54.87	1,749.66	197.82	281.16	14,516,350.76	2,081,954.65	39° 57' 45.605 N	109° 25' 27.479 W
1,900.00	20.00	54.87	1,843.63	217.50	309.13	14,516,370.93	2,081,982.27	39° 57' 45.800 N	109° 25' 27.120 W
2,000.00	20.00	54.87	1,937.60	237.18	337.10	14,516,391.10	2,082,009.89	39° 57' 45.994 N	109° 25' 26.761 W
2,100.00	20.00	54.87	2,031.57	256.86	365.08	14,516,411.27	2,082,037.51	39° 57' 46.189 N	109° 25' 26.402 W
2,182.40	20.00	54.87	2,109.00	273.08	388.12	14,516,427.89	2,082,060.27	39° 57' 46.349 N	109° 25' 26.105 W
<b>8 5/8"</b>									
2,200.00	20.00	54.87	2,125.54	276.54	393.05	14,516,431.44	2,082,065.13	39° 57' 46.383 N	109° 25' 26.042 W
2,300.00	20.00	54.87	2,219.51	296.23	421.02	14,516,451.61	2,082,092.75	39° 57' 46.578 N	109° 25' 25.683 W
2,400.00	20.00	54.87	2,313.48	315.91	448.99	14,516,471.79	2,082,120.37	39° 57' 46.772 N	109° 25' 25.324 W
2,500.00	20.00	54.87	2,407.45	335.59	476.96	14,516,491.96	2,082,147.99	39° 57' 46.967 N	109° 25' 24.964 W
2,600.00	20.00	54.87	2,501.42	355.27	504.94	14,516,512.13	2,082,175.61	39° 57' 47.162 N	109° 25' 24.605 W
2,700.00	20.00	54.87	2,595.39	374.95	532.91	14,516,532.30	2,082,203.23	39° 57' 47.356 N	109° 25' 24.246 W
2,800.00	20.00	54.87	2,689.35	394.63	560.88	14,516,552.47	2,082,230.85	39° 57' 47.551 N	109° 25' 23.886 W
2,900.00	20.00	54.87	2,783.32	414.31	588.85	14,516,572.64	2,082,258.47	39° 57' 47.745 N	109° 25' 23.527 W
3,000.00	20.00	54.87	2,877.29	433.99	616.82	14,516,592.82	2,082,286.09	39° 57' 47.940 N	109° 25' 23.168 W
3,100.00	20.00	54.87	2,971.26	453.67	644.80	14,516,612.99	2,082,313.71	39° 57' 48.134 N	109° 25' 22.809 W
3,200.00	20.00	54.87	3,065.23	473.35	672.77	14,516,633.16	2,082,341.33	39° 57' 48.329 N	109° 25' 22.449 W
3,254.62	20.00	54.87	3,116.56	484.10	688.05	14,516,644.18	2,082,356.42	39° 57' 48.435 N	109° 25' 22.253 W
<b>Start Drop -2.00</b>									
3,300.00	19.09	54.87	3,159.32	492.84	700.46	14,516,653.13	2,082,368.68	39° 57' 48.521 N	109° 25' 22.094 W
3,400.00	17.09	54.87	3,254.37	510.71	725.86	14,516,671.45	2,082,393.75	39° 57' 48.698 N	109° 25' 21.767 W
3,500.00	15.09	54.87	3,350.45	526.66	748.53	14,516,687.79	2,082,416.14	39° 57' 48.856 N	109° 25' 21.476 W
3,600.00	13.09	54.87	3,447.43	540.67	768.44	14,516,702.15	2,082,435.80	39° 57' 48.994 N	109° 25' 21.220 W
3,700.00	11.09	54.87	3,545.21	552.72	785.57	14,516,714.51	2,082,452.72	39° 57' 49.113 N	109° 25' 21.000 W
3,800.00	9.09	54.87	3,643.66	562.81	799.91	14,516,724.84	2,082,466.87	39° 57' 49.213 N	109° 25' 20.816 W
3,900.00	7.09	54.87	3,742.66	570.91	811.42	14,516,733.14	2,082,478.24	39° 57' 49.293 N	109° 25' 20.668 W
4,000.00	5.09	54.87	3,842.09	577.01	820.10	14,516,739.40	2,082,486.81	39° 57' 49.353 N	109° 25' 20.557 W
4,100.00	3.09	54.87	3,941.83	581.12	825.93	14,516,743.61	2,082,492.57	39° 57' 49.394 N	109° 25' 20.482 W
4,200.00	1.09	54.87	4,041.76	583.22	828.92	14,516,745.76	2,082,495.52	39° 57' 49.415 N	109° 25' 20.444 W
4,254.62	0.00	0.00	4,096.38	583.52	829.35	14,516,746.07	2,082,495.94	39° 57' 49.418 N	109° 25' 20.438 W
<b>Start 4473.62 hold at 4254.62 MD</b>									
4,255.25	0.00	0.00	4,097.00	583.52	829.35	14,516,746.07	2,082,495.94	39° 57' 49.418 N	109° 25' 20.438 W
<b>WASATCH</b>									
4,300.00	0.00	0.00	4,141.75	583.52	829.35	14,516,746.07	2,082,495.94	39° 57' 49.418 N	109° 25' 20.438 W
4,400.00	0.00	0.00	4,241.75	583.52	829.35	14,516,746.07	2,082,495.94	39° 57' 49.418 N	109° 25' 20.438 W
4,500.00	0.00	0.00	4,341.75	583.52	829.35	14,516,746.07	2,082,495.94	39° 57' 49.418 N	109° 25' 20.438 W
4,600.00	0.00	0.00	4,441.75	583.52	829.35	14,516,746.07	2,082,495.94	39° 57' 49.418 N	109° 25' 20.438 W
4,700.00	0.00	0.00	4,541.75	583.52	829.35	14,516,746.07	2,082,495.94	39° 57' 49.418 N	109° 25' 20.438 W
4,800.00	0.00	0.00	4,641.75	583.52	829.35	14,516,746.07	2,082,495.94	39° 57' 49.418 N	109° 25' 20.438 W
4,900.00	0.00	0.00	4,741.75	583.52	829.35	14,516,746.07	2,082,495.94	39° 57' 49.418 N	109° 25' 20.438 W
5,000.00	0.00	0.00	4,841.75	583.52	829.35	14,516,746.07	2,082,495.94	39° 57' 49.418 N	109° 25' 20.438 W
5,100.00	0.00	0.00	4,941.75	583.52	829.35	14,516,746.07	2,082,495.94	39° 57' 49.418 N	109° 25' 20.438 W
5,200.00	0.00	0.00	5,041.75	583.52	829.35	14,516,746.07	2,082,495.94	39° 57' 49.418 N	109° 25' 20.438 W

<b>Company:</b>	US ROCKIES REGION PLANNING	<b>Local Co-ordinate Reference:</b>	Well P_NBU 1022-10G4CS
<b>Project:</b>	UTAH - UTM (feet), NAD27, Zone 12N	<b>TVD Reference:</b>	GL 5069' & RKB 4' @ 5073.00ft (ASSUMED)
<b>Site:</b>	UINTAH_NBU 1022-10G4CS	<b>MD Reference:</b>	GL 5069' & RKB 4' @ 5073.00ft (ASSUMED)
<b>Well:</b>	P_NBU 1022-10G4CS	<b>North Reference:</b>	True
<b>Wellbore:</b>	P_NBU 1022-10G4CS	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	PLAN #1 12-7-10 RHS	<b>Database:</b>	EDM5000-RobertS-Local

#### Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
5,300.00	0.00	0.00	5,141.75	583.52	829.35	14,516,746.07	2,082,495.94	39° 57' 49.418 N	109° 25' 20.438 W
5,400.00	0.00	0.00	5,241.75	583.52	829.35	14,516,746.07	2,082,495.94	39° 57' 49.418 N	109° 25' 20.438 W
5,500.00	0.00	0.00	5,341.75	583.52	829.35	14,516,746.07	2,082,495.94	39° 57' 49.418 N	109° 25' 20.438 W
5,600.00	0.00	0.00	5,441.75	583.52	829.35	14,516,746.07	2,082,495.94	39° 57' 49.418 N	109° 25' 20.438 W
5,700.00	0.00	0.00	5,541.75	583.52	829.35	14,516,746.07	2,082,495.94	39° 57' 49.418 N	109° 25' 20.438 W
5,800.00	0.00	0.00	5,641.75	583.52	829.35	14,516,746.07	2,082,495.94	39° 57' 49.418 N	109° 25' 20.438 W
5,900.00	0.00	0.00	5,741.75	583.52	829.35	14,516,746.07	2,082,495.94	39° 57' 49.418 N	109° 25' 20.438 W
6,000.00	0.00	0.00	5,841.75	583.52	829.35	14,516,746.07	2,082,495.94	39° 57' 49.418 N	109° 25' 20.438 W
6,100.00	0.00	0.00	5,941.75	583.52	829.35	14,516,746.07	2,082,495.94	39° 57' 49.418 N	109° 25' 20.438 W
6,200.00	0.00	0.00	6,041.75	583.52	829.35	14,516,746.07	2,082,495.94	39° 57' 49.418 N	109° 25' 20.438 W
6,300.00	0.00	0.00	6,141.75	583.52	829.35	14,516,746.07	2,082,495.94	39° 57' 49.418 N	109° 25' 20.438 W
6,400.00	0.00	0.00	6,241.75	583.52	829.35	14,516,746.07	2,082,495.94	39° 57' 49.418 N	109° 25' 20.438 W
6,500.00	0.00	0.00	6,341.75	583.52	829.35	14,516,746.07	2,082,495.94	39° 57' 49.418 N	109° 25' 20.438 W
6,576.25	0.00	0.00	6,418.00	583.52	829.35	14,516,746.07	2,082,495.94	39° 57' 49.418 N	109° 25' 20.438 W
<b>MESAVERDE</b>									
6,600.00	0.00	0.00	6,441.75	583.52	829.35	14,516,746.07	2,082,495.94	39° 57' 49.418 N	109° 25' 20.438 W
6,700.00	0.00	0.00	6,541.75	583.52	829.35	14,516,746.07	2,082,495.94	39° 57' 49.418 N	109° 25' 20.438 W
6,800.00	0.00	0.00	6,641.75	583.52	829.35	14,516,746.07	2,082,495.94	39° 57' 49.418 N	109° 25' 20.438 W
6,900.00	0.00	0.00	6,741.75	583.52	829.35	14,516,746.07	2,082,495.94	39° 57' 49.418 N	109° 25' 20.438 W
7,000.00	0.00	0.00	6,841.75	583.52	829.35	14,516,746.07	2,082,495.94	39° 57' 49.418 N	109° 25' 20.438 W
7,100.00	0.00	0.00	6,941.75	583.52	829.35	14,516,746.07	2,082,495.94	39° 57' 49.418 N	109° 25' 20.438 W
7,200.00	0.00	0.00	7,041.75	583.52	829.35	14,516,746.07	2,082,495.94	39° 57' 49.418 N	109° 25' 20.438 W
7,300.00	0.00	0.00	7,141.75	583.52	829.35	14,516,746.07	2,082,495.94	39° 57' 49.418 N	109° 25' 20.438 W
7,400.00	0.00	0.00	7,241.75	583.52	829.35	14,516,746.07	2,082,495.94	39° 57' 49.418 N	109° 25' 20.438 W
7,500.00	0.00	0.00	7,341.75	583.52	829.35	14,516,746.07	2,082,495.94	39° 57' 49.418 N	109° 25' 20.438 W
7,600.00	0.00	0.00	7,441.75	583.52	829.35	14,516,746.07	2,082,495.94	39° 57' 49.418 N	109° 25' 20.438 W
7,700.00	0.00	0.00	7,541.75	583.52	829.35	14,516,746.07	2,082,495.94	39° 57' 49.418 N	109° 25' 20.438 W
7,800.00	0.00	0.00	7,641.75	583.52	829.35	14,516,746.07	2,082,495.94	39° 57' 49.418 N	109° 25' 20.438 W
7,900.00	0.00	0.00	7,741.75	583.52	829.35	14,516,746.07	2,082,495.94	39° 57' 49.418 N	109° 25' 20.438 W
8,000.00	0.00	0.00	7,841.75	583.52	829.35	14,516,746.07	2,082,495.94	39° 57' 49.418 N	109° 25' 20.438 W
8,100.00	0.00	0.00	7,941.75	583.52	829.35	14,516,746.07	2,082,495.94	39° 57' 49.418 N	109° 25' 20.438 W
8,200.00	0.00	0.00	8,041.75	583.52	829.35	14,516,746.07	2,082,495.94	39° 57' 49.418 N	109° 25' 20.438 W
8,300.00	0.00	0.00	8,141.75	583.52	829.35	14,516,746.07	2,082,495.94	39° 57' 49.418 N	109° 25' 20.438 W
8,400.00	0.00	0.00	8,241.75	583.52	829.35	14,516,746.07	2,082,495.94	39° 57' 49.418 N	109° 25' 20.438 W
8,500.00	0.00	0.00	8,341.75	583.52	829.35	14,516,746.07	2,082,495.94	39° 57' 49.418 N	109° 25' 20.438 W
8,600.00	0.00	0.00	8,441.75	583.52	829.35	14,516,746.07	2,082,495.94	39° 57' 49.418 N	109° 25' 20.438 W
8,700.00	0.00	0.00	8,541.75	583.52	829.35	14,516,746.07	2,082,495.94	39° 57' 49.418 N	109° 25' 20.438 W
8,728.25	0.00	0.00	8,570.00	583.52	829.35	14,516,746.07	2,082,495.94	39° 57' 49.418 N	109° 25' 20.438 W
<b>TD at 8728.25 - PBHL NBU 1022-10G4CS</b>									

#### Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
PBHL NBU 1022-10G4C - plan hits target center - Circle (radius 25.00)	0.00	0.00	8,570.00	583.52	829.35	14,516,746.07	2,082,495.94	39° 57' 49.418 N	109° 25' 20.438 W

<b>Company:</b>	US ROCKIES REGION PLANNING	<b>Local Co-ordinate Reference:</b>	Well P_NBU 1022-10G4CS
<b>Project:</b>	UTAH - UTM (feet), NAD27, Zone 12N	<b>TVD Reference:</b>	GL 5069' & RKB 4' @ 5073.00ft (ASSUMED)
<b>Site:</b>	UINTAH_NBU 1022-10G4CS	<b>MD Reference:</b>	GL 5069' & RKB 4' @ 5073.00ft (ASSUMED)
<b>Well:</b>	P_NBU 1022-10G4CS	<b>North Reference:</b>	True
<b>Wellbore:</b>	P_NBU 1022-10G4CS	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	PLAN #1 12-7-10 RHS	<b>Database:</b>	EDM5000-RobertS-Local

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name		Casing Diameter (in)	Hole Diameter (in)
2,182.40	2,109.00	8 5/8"		8.625	11.000

Formations					
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
993.76	987.00	GREEN RIVER			
4,255.25	4,097.00	WASATCH			
6,576.25	6,418.00	MESAVERDE			

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment	
		+N/-S (ft)	+E/-W (ft)		
300	300	0	0	Start Build 2.00	
1300	1280	99	141	Start 1954.62 hold at 1300.00 MD	
3255	3117	484	688	Start Drop -2.00	
4255	4096	584	829	Start 4473.62 hold at 4254.62 MD	
8728	8570	584	829	TD at 8728.25	

Checked By: _____	Approved By: _____	Date: _____
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Kerr-McGee Oil & Gas Onshore LP  
P.O. Box 173779  
Denver, CO 80217-3779

December 6, 2010

Ms. Diana Mason  
Division of Oil, Gas and Mining  
P.O. Box 145801  
Salt Lake City, UT 84114-6100

Re: Directional Drilling R649-3-11  
NBU 1022-10G4CS (formerly NBU 1022-10J)  
T10S-R22E  
Section 10: SWNE  
Surface: 2136' FSL, 2620' FEL  
Bottom Hole: 2550' FNL, 1816' FEL  
Uintah County, Utah

Dear Mrs. Mason:

Pursuant to the filing of Kerr-McGee Oil & Gas Onshore LP's (Kerr-McGee) sundry to Application for Permit to Drill regarding the above referenced well, we are hereby submitting this letter in accordance with Oil & Gas Conservation Rule R649-3-11 pertaining to the Exception to Location and Siting of Wells.

- Kerr-McGee's NBU 1022-10G4CS located within the Natural Buttes Unit area.
- Kerr-McGee is permitting this well as a directional well in order to minimize surface disturbance. Locating the well at the surface location and directionally drilling from this location, Kerr-McGee will be able to utilize the existing road and pipelines in the area.
- Furthermore, Kerr-McGee certifies that it is the sole working interest owner within 460 feet of the entire directional well bore.

Therefore, based on the above stated information Kerr-McGee Oil & Gas Onshore LP requests the permit be granted pursuant to R649-3-11.

Sincerely,

KERR-MCGEE OIL & GAS ONSHORE LP

A handwritten signature in blue ink that reads 'James C. Colligan III'.

James C. Colligan III  
Landman

**RECEIVED** December 16, 2010

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		<b>FORM 9</b>
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> UTU-25787
<b>1. TYPE OF WELL</b> Gas Well		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>
<b>2. NAME OF OPERATOR:</b> KERR-MCGEE OIL & GAS ONSHORE, L.P.		<b>7. UNIT or CA AGREEMENT NAME:</b> NATURAL BUTTES
<b>3. ADDRESS OF OPERATOR:</b> P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779		<b>8. WELL NAME and NUMBER:</b> NBU 1022-10J
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 2136 FSL 2620 FEL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NWSE Section: 10 Township: 10.0S Range: 22.0E Meridian: S		<b>9. API NUMBER:</b> 43047371680000
<b>PHONE NUMBER:</b> 720 929-6007 Ext		<b>9. FIELD and POOL or WILDCAT:</b> NATURAL BUTTES
<b>COUNTY:</b> UINTAH		<b>STATE:</b> UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> <b>NOTICE OF INTENT</b> Approximate date work will start: 1/7/2011  <input type="checkbox"/> <b>SUBSEQUENT REPORT</b> Date of Work Completion:  <input type="checkbox"/> <b>SPUD REPORT</b> Date of Spud:  <input type="checkbox"/> <b>DRILLING REPORT</b> Report Date:	<input type="checkbox"/> ACIDIZE <input checked="" type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> OTHER	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION OTHER: <input style="width: 100px;" type="text"/>

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.  

The operator requests approval for a change in the drilling program. The operator proposes to drill a 12-1/4" surface hole and run 8-5/8" IJ55 28LB surface casing instead of the previously approved 11" hole and 8-5/8" casing. Please see attachments for details that are specifically outlined in the drill program. Also, please note that previous documents had the incorrect lease number documented. The correct lease number for this well is UTU02518

Thank you.

**Accepted by the**  
**Utah Division of**  
**Oil, Gas and Mining**

**Date:** 01/10/2011

**By:**

<b>NAME (PLEASE PRINT)</b> Andy Lytle	<b>PHONE NUMBER</b> 720 929-6100	<b>TITLE</b> Regulatory Analyst
<b>SIGNATURE</b> N/A	<b>DATE</b> 1/6/2011	

**KERR-McGEE OIL & GAS ONSHORE LP**  
**DRILLING PROGRAM**

COMPANY NAME	KERR-McGEE OIL & GAS ONSHORE LP				DATE	January 6, 2011	
WELL NAME	NBU 1022-10G4CS				TD	8,570'	8,728' MD
FIELD	Natural Buttes	COUNTY	Utah	STATE	Utah	FINISHED ELEVATION	5,067'
SURFACE LOCATION	NWSE	2136' FSL	2620' FEL	Sec 10	T 10S	R 22E	
	Latitude:	39.962093	Longitude:	-109.425985		NAD 83	
BTM HOLE LOCATION	SWNE	2550' FNL	1816' FEL	Sec 10	T 10S	R 22E	
	Latitude:	39.963708	Longitude:	-109.423118		NAD 83	
OBJECTIVE ZONE(S)	Wasatch/Mesaverde						
ADDITIONAL INFO	Regulatory Agencies: BLM (Minerals), BLM (Surface), UDOGM Tri-County Health Dept.						

GEOLOGICAL			MECHANICAL		
LOGS	FORMATION	DEPTH	HOLE SIZE	CASING SIZE	MUD WEIGHT
		40'		14"	
			12.25"	8-5/8", 28#, IJ-55, LTC	Air mist
<p>All water flows encountered while drilling will be reported to the appropriate agencies.</p>					
	Green River @	0,987'			
	Top of Birds Nest @	1,290'			
	Mahogany @	1,659'			
	Preset f/ GL @	2,110' MD			
<p>Note: 11" surface hole will usually be drilled ±400' below the lost circulation zone (aka bird's nest). Drilled depth may be ±200' of the estimated set depth depending on the actual depth of the loss zone.</p>					
	Wasatch @	4,097'			
<p>Mud logging program TBD Cased hole logging program from TD - surf csg</p>			7-7/8"	4-1/2" 11.6# I-80 or equivalent BTC csg	Water / Fresh Water Mud 8.3-11.5 ppg
	Mverde @	6,418' TVD			
	MVU2 @	7,373' TVD			
	MVU1 @	8,007' TVD			
<p>Max anticipated Mud required 11.5 ppg</p>					
	TD @	8,570' TVD 8,728' MD			



# KERR-McGEE OIL & GAS ONSHORE LP

## DRILLING PROGRAM

### CASING PROGRAM

	SIZE	INTERVAL	WT.	GR.	CPLG.	DESIGN FACTORS		
						BURST	COLLAPSE	TENSION
CONDUCTOR	14"	0-40'				3,390	1,880	348,000
SURFACE	8-5/8"	0 to 2,110	28.00	IJ-55	LTC	1.05	1.90	5.83
						7,780	6,350	278,000
PRODUCTION	4-1/2"	0 to 8,728	11.60	I-80	BTC	2.40	1.24	3.20

\*Burst on surface casing is controlled by fracture gradient as shoe with gas gradient above.

D.F. = 2.55

1) Max Anticipated Surf. Press.(MASP) (Surface Casing) = (Pore Pressure at next csg point-(0.22 psi/ft-partial evac gradient x TVD of next csg point))

2) MASP (Prod Casing) = Pore Pressure at TD - (0.22 psi/ft-partial evac gradient x TD)

(Burst Assumptions: TD = 11.5 ppg)

0.22 psi/ft = gradient for partially evac wellbore

(Collapse Assumption: Fully Evacuated Casing, Max MW)

(Tension Assumptions: Air Weight of Casing\*Buoy.Fact. of water)

**MASP 3,142 psi**

3) Maximum Anticipated Bottom Hole Pressure (MABHP) = Pore Pressure at TD

(Burst Assumptions: TD = 11.5 ppg)

0.59 psi/ft = bottomhole gradient

(Collapse Assumption: Fully Evacuated Casing, Max MW)

(Tension Assumptions: Air Weight of Casing\*Buoy.Fact. of water)

**MABHP 5,028 psi**

### CEMENT PROGRAM

		FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT	YIELD
SURFACE	LEAD	500'	Premium cmt + 2% CaCl	290	60%	15.80	1.15
	Option 1		+ 0.25 pps flocele				
	TOP OUT CMT (6 jobs)	1,200'	20 gals sodium silicate + Premium cmt	430	0%	15.80	1.15
			+ 2% CaCl + 0.25 pps flocele				
SURFACE		<b>NOTE: If well will circulate water to surface, option 2 will be utilized</b>					
Option 2	LEAD	1,610'	65/35 Poz + 6% Gel + 10 pps gilsonite	240	35%	11.00	3.82
			+ 0.25 pps Flocele + 3% salt BWOW				
	TAIL	500'	Premium cmt + 2% CaCl	250	35%	15.80	1.15
			+ 0.25 pps flocele				
	TOP OUT CMT	as required	Premium cmt + 2% CaCl	as req.		15.80	1.15
PRODUCTION	LEAD	3,588'	Premium Lite II +0.25 pps	260	10%	11.00	3.38
			celloflake + 5 pps gilsonite + 10% gel				
			+ 0.5% extender				
	TAIL	5,140'	50/50 Poz/G + 10% salt + 2% gel	990	10%	14.30	1.31
			+ 0.1% R-3				

\*Substitute caliper hole volume plus 0% excess for LEAD if accurate caliper is obtained

\*Substitute caliper hole volume plus 10% excess for TAIL if accurate caliper is obtained

### FLOAT EQUIPMENT & CENTRALIZERS

SURFACE	Guide shoe, 1 jt, insert float. Centralize first 3 joints with bow spring centralizers. Thread lock guide shoe
PRODUCTION	Float shoe, 1 jt, float collar. No centralizers will be used.

### ADDITIONAL INFORMATION

Test casing head to 750 psi after installing. Test surface casing to 1,500 psi prior to drilling out.

BOPE: 11" 5M with one annular and 2 rams. The BOPE will be installed before the production hole is drilled and tested to 5,000 psi (annular to 2,500 psi) prior to drilling out the surface casing shoe. Record on chart recorder and tour sheet. Function test rams on each trip. Maintain safety valve and inside BOP on rig floor at all times. Most rigs have top drives; however, if used, the Kelly is to be equipped with upper and lower kelly valves.

Surveys will be taken at 1,000' minimum intervals.

Most rigs have PVT System for mud monitoring. If no PVT is available, visual monitoring will be utilized.

DRILLING ENGINEER:

John Huycke / Emile Goodwin

DATE:

DRILLING SUPERINTENDENT:

John Merkel / Lovel Young

DATE:

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		<b>FORM 9</b>
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> UTU-025187
<b>1. TYPE OF WELL</b> Gas Well		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>
<b>2. NAME OF OPERATOR:</b> KERR-MCGEE OIL & GAS ONSHORE, L.P.		<b>7. UNIT or CA AGREEMENT NAME:</b> NATURAL BUTTES
<b>3. ADDRESS OF OPERATOR:</b> P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779		<b>8. WELL NAME and NUMBER:</b> NBU 1022-10G4CS
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 2136 FSL 2620 FEL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NWSE Section: 10 Township: 10.0S Range: 22.0E Meridian: S		<b>9. API NUMBER:</b> 43047371680000
<b>PHONE NUMBER:</b> 720 929-6515 Ext		<b>9. FIELD and POOL or WILDCAT:</b> NATURAL BUTTES
<b>COUNTY:</b> UINTAH		<b>STATE:</b> UTAH
<b>11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA</b>		
<b>TYPE OF SUBMISSION</b>	<b>TYPE OF ACTION</b>	
<input type="checkbox"/> <b>NOTICE OF INTENT</b> Approximate date work will start:	<input type="checkbox"/> <b>ACIDIZE</b>	
<input type="checkbox"/> <b>SUBSEQUENT REPORT</b> Date of Work Completion:	<input type="checkbox"/> <b>ALTER CASING</b>	
<input checked="" type="checkbox"/> <b>SPUD REPORT</b> Date of Spud: 2/7/2011	<input type="checkbox"/> <b>CASING REPAIR</b>	
<input type="checkbox"/> <b>DRILLING REPORT</b> Report Date:	<input type="checkbox"/> <b>CHANGE TO PREVIOUS PLANS</b>	
	<input type="checkbox"/> <b>CHANGE TUBING</b>	
	<input type="checkbox"/> <b>CHANGE WELL STATUS</b>	
	<input type="checkbox"/> <b>COMMINGLE PRODUCING FORMATIONS</b>	
	<input type="checkbox"/> <b>DEEPEN</b>	
	<input type="checkbox"/> <b>FRACTURE TREAT</b>	
	<input type="checkbox"/> <b>OPERATOR CHANGE</b>	
	<input type="checkbox"/> <b>PLUG AND ABANDON</b>	
	<input type="checkbox"/> <b>PRODUCTION START OR RESUME</b>	
	<input type="checkbox"/> <b>RECLAMATION OF WELL SITE</b>	
	<input type="checkbox"/> <b>REPERFORATE CURRENT FORMATION</b>	
	<input type="checkbox"/> <b>SIDETRACK TO REPAIR WELL</b>	
	<input type="checkbox"/> <b>TUBING REPAIR</b>	
	<input type="checkbox"/> <b>VENT OR FLARE</b>	
	<input type="checkbox"/> <b>WATER SHUTOFF</b>	
	<input type="checkbox"/> <b>SI TA STATUS EXTENSION</b>	
	<input type="checkbox"/> <b>WILDCAT WELL DETERMINATION</b>	
	<input type="checkbox"/> <b>OTHER:</b> <input style="width: 100px;" type="text"/>	
<b>12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.</b> MIRU PETE MARTIN BUCKET RIG. DRILLED 20" CONDUCTOR HOLE TO 40'. RAN 14" 36.7# SCHEDULE 10 CONDUCTOR PIPE. CMT W/28 SX READY MIX SPUD WELL LOCATION ON FEBUARY 07, 2011 AT 12:00 HRS.		
<b>Accepted by the</b> <b>Utah Division of</b> <b>Oil, Gas and Mining</b> <b>FOR RECORD ONLY</b> 02/09/2011		
<b>NAME (PLEASE PRINT)</b> Andy Lytle	<b>PHONE NUMBER</b> 720 929-6100	<b>TITLE</b> Regulatory Analyst
<b>SIGNATURE</b> N/A	<b>DATE</b> 2/9/2011	

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		<b>FORM 9</b>
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> UTU-25187
<b>1. TYPE OF WELL</b> Gas Well		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>
<b>2. NAME OF OPERATOR:</b> KERR-MCGEE OIL & GAS ONSHORE, L.P.		<b>7. UNIT or CA AGREEMENT NAME:</b> NATURAL BUTTES
<b>3. ADDRESS OF OPERATOR:</b> P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779		<b>8. WELL NAME and NUMBER:</b> NBU 1022-10G4CS
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 2136 FSL 2620 FEL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NWSE Section: 10 Township: 10.0S Range: 22.0E Meridian: S		<b>9. API NUMBER:</b> 43047371680000
<b>PHONE NUMBER:</b> 720 929-6515 Ext		<b>9. FIELD and POOL or WILDCAT:</b> NATURAL BUTTES
<b>COUNTY:</b> UINTAH		<b>STATE:</b> UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> <b>NOTICE OF INTENT</b> Approximate date work will start:	<input type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> OTHER	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION OTHER: <input style="width: 100px;" type="text"/>
<input type="checkbox"/> <b>SUBSEQUENT REPORT</b> Date of Work Completion:			
<input type="checkbox"/> <b>SPUD REPORT</b> Date of Spud:			
<input checked="" type="checkbox"/> <b>DRILLING REPORT</b> Report Date: 2/13/2011			

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.  
 MIRU PROPETRO AIR RIG ON FEBRUARY 11, 2011. DRILLED 12 1/4" SURFACE HOLE TO 2170. RAN 8 5/8" 28# IJ-55 SURFACE CSG. PUMP 115 BBLS FRESH WATER. PUMP 20 BBLS GEL WATER. PUMP 395 SX CLASS G PREM @ 15.8 PPG, 1.15 YD. NO CIRC. DROP PLUG ON THE FLY, DISPLACED W/ 130 BBLS WATER. LIFT PRESSURE 140 PSI, DIDN'T BUMP PLUG, FLOAT HELD. TOP OUT #1 W/ 55 SX CLASS G PREM @ 15.8 PPG, 1.15 YD. CMT FELL. WOC 2 HRS. TOP OUT #2 W/ 100 SX CLASS G PREM @ 15.8 PPG, 1.15 YD. WOC 2 HRS. TOP OUT #3 W/ 125 SX CLASS G PREM @ 15.8 PPG, 1.15 YD. NO CEMENT TO SURFACE. WILL HAVE PETE MARTIN RIG TOP OUT SURFACE CEMENT. WORT.

<b>NAME (PLEASE PRINT)</b> Andy Lytle	<b>PHONE NUMBER</b> 720 929-6100	<b>TITLE</b> Regulatory Analyst
<b>SIGNATURE</b> N/A		<b>DATE</b> 2/14/2011

 Accepted by the  
 Utah Division of  
 Oil, Gas and Mining  
 FOR RECORD ONLY

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		<b>FORM 9</b>
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> UTU-025187
<b>1. TYPE OF WELL</b> Gas Well		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>
<b>2. NAME OF OPERATOR:</b> KERR-MCGEE OIL & GAS ONSHORE, L.P.		<b>7. UNIT or CA AGREEMENT NAME:</b> NATURAL BUTTES
<b>3. ADDRESS OF OPERATOR:</b> P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779		<b>8. WELL NAME and NUMBER:</b> NBU 1022-10G4CS
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 2136 FSL 2620 FEL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NWSE Section: 10 Township: 10.0S Range: 22.0E Meridian: S		<b>9. API NUMBER:</b> 43047371680000
<b>PHONE NUMBER:</b> 720 929-6515 Ext		<b>9. FIELD and POOL or WILDCAT:</b> NATURAL BUTTES
<b>COUNTY:</b> UINTAH		<b>STATE:</b> UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> <b>NOTICE OF INTENT</b> Approximate date work will start:	<input type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> OTHER	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION OTHER: <input style="width: 100px;" type="text"/>
<input type="checkbox"/> <b>SUBSEQUENT REPORT</b> Date of Work Completion:			
<input type="checkbox"/> <b>SPUD REPORT</b> Date of Spud:			
<input checked="" type="checkbox"/> <b>DRILLING REPORT</b> Report Date: 3/1/2011			

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.  
 FINISHED DRILLING FROM 2170' TO 8905' ON FEBRUARY 26, 2011. RAN 4 1/2" 11.6# I-80 PRODUCTION CSG. PUMP 40 BBLS SPACER, LEAD CEMENT W/ 538 SX CLASS G PREM LITE @ 12.5 PPG, 1.98 YD. TAILED CEMENT W/ 1167 SX CLASS G 50/50 POZ MIX @ 14.3 PPG, 1.31 YD. DISPLACED W/ 137.5 BBLS CLAYTREAT WATER. FINAL LIFT 2950 PSI, BUMPED PLUG W/ 3610 PSI & HELD FOR 5 MIN. 1.5 BBL BACK TO THE TRUCK. 35 BBL SPACER TO SURFACE. EST. TOC @ 125'. RD CEMENTERS AND CLEANED PITS. RELEASED PIONEER RIG #69 ON MARCH 1, 2011 @ 16:30 HRS.

<b>NAME (PLEASE PRINT)</b> Andy Lytle	<b>PHONE NUMBER</b> 720 929-6100	<b>TITLE</b> Regulatory Analyst
<b>SIGNATURE</b> N/A		<b>DATE</b> 3/2/2011

 Accepted by the  
 Utah Division of  
 Oil, Gas and Mining  
**FOR RECORD ONLY**

## BLM - Vernal Field Office - Notification Form

Operator KERR-McGEE OIL & GAS Rig Name/# BUCKET RIG  
Submitted By ANDY LYTLE Phone Number 720.929.6100  
Well Name/Number NBU 1022-10G4CS  
Qtr/Qtr NWSE Section 10 Township 10S Range 22E  
Lease Serial Number UTU-25787  
API Number 4304737168

Spud Notice – Spud is the initial spudding of the well, not drilling out below a casing string.

Date/Time 02/07/2011 11:00 HRS AM ☐ PM ☐

Casing – Please report time casing run starts, not cementing times.

- ☒ Surface Casing  
☐ Intermediate Casing  
☐ Production Casing  
☐ Liner  
☐ Other

RECEIVED

FEB 04 2011

DIV. OF OIL, GAS & MINING

Date/Time 02/12/2011 08:00 HRS AM ☐ PM ☐

BOPE

- ☐ Initial BOPE test at surface casing point  
☐ BOPE test at intermediate casing point  
☐ 30 day BOPE test  
☐ Other

Date/Time \_\_\_\_\_ AM ☐ PM ☐

Remarks ESTIMATED DATE AND TIME. PLEASE CONTACT KENNY GATHINGS AT

435.781.7048 OR LOVEL YOUNG AT 435.828.0986

SUBMIT AS EMAIL

Print Form

BLM - Vernal Field Office - Notification Form

Operator ANADARKO Rig Name/# PIONEER 69  
Submitted By DALTON KING Phone Number 435-828-0982  
Well Name/Number NBU 1022-10G4CS  
Qtr/Qtr NW/SE Section 10 Township 10S Range 22E  
Lease Serial Number UTU-025187  
API Number 43-047-37168

Spud Notice – Spud is the initial spudding of the well, not drilling out below a casing string.

Date/Time \_\_\_\_\_ AM ☐ PM ☐

Casing – Please report time casing run starts, not cementing times.

- ☐ Surface Casing  
☐ Intermediate Casing  
☒ Production Casing  
☐ Liner  
☐ Other

Date/Time 02/28/2011 16:00 AM ☐ PM ☒

BOPE

- ☐ Initial BOPE test at surface casing point  
☐ BOPE test at intermediate casing point  
☐ 30 day BOPE test  
☐ Other

Date/Time \_\_\_\_\_ AM ☐ PM ☐

Remarks TIME IS ESTIMATED

RECEIVED

FEB 28 2011

DIV. OF OIL, GAS & MINING

SUBMIT AS EMAIL

Print Form

BLM - Vernal Field Office - Notification Form

Operator ANADARKO Rig Name/# PIONEER 69  
Submitted By DALTON KING Phone Number 435-828-0982  
Well Name/Number NBU 1022-10G4CS  
Qtr/Qtr NW/SE Section 10 Township 10S Range 22E  
Lease Serial Number UTU-025187  
API Number 43-047-37168

Spud Notice – Spud is the initial spudding of the well, not drilling out below a casing string.

Date/Time \_\_\_\_\_ AM ☐ PM ☐

Casing – Please report time casing run starts, not cementing times.

- ☐ Surface Casing  
☐ Intermediate Casing  
☐ Production Casing  
☐ Liner  
☐ Other

Date/Time \_\_\_\_\_ AM ☐ PM ☐

BOPE

- ☒ Initial BOPE test at surface casing point  
☐ BOPE test at intermediate casing point  
☐ 30 day BOPE test  
☐ Other

Date/Time 02/20/2011 06:00 AM ☒ PM ☐

Remarks TIME IS ESTIMATED

RECEIVED

FEB 22 2011

DIV. OF OIL, GAS & MINING

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		<b>FORM 9</b>
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> UTU-025187
<b>1. TYPE OF WELL</b> Gas Well		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>
<b>2. NAME OF OPERATOR:</b> KERR-MCGEE OIL & GAS ONSHORE, L.P.		<b>7. UNIT or CA AGREEMENT NAME:</b> NATURAL BUTTES
<b>3. ADDRESS OF OPERATOR:</b> P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779		<b>8. WELL NAME and NUMBER:</b> NBU 1022-10G4CS
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 2136 FSL 2620 FEL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NWSE Section: 10 Township: 10.0S Range: 22.0E Meridian: S		<b>9. API NUMBER:</b> 43047371680000
<b>11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA</b>		<b>9. FIELD and POOL or WILDCAT:</b> NATURAL BUTTES
<b>11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA</b>		
<b>TYPE OF SUBMISSION</b>	<b>TYPE OF ACTION</b>	
<input type="checkbox"/> <b>NOTICE OF INTENT</b> Approximate date work will start:	<input type="checkbox"/> <b>ACIDIZE</b>	
<input type="checkbox"/> <b>SUBSEQUENT REPORT</b> Date of Work Completion:	<input type="checkbox"/> <b>ALTER CASING</b>	
<input type="checkbox"/> <b>SPUD REPORT</b> Date of Spud:	<input type="checkbox"/> <b>CASING REPAIR</b>	
<input checked="" type="checkbox"/> <b>DRILLING REPORT</b> Report Date: 3/17/2011	<input type="checkbox"/> <b>CHANGE TO PREVIOUS PLANS</b>	
	<input type="checkbox"/> <b>CHANGE WELL STATUS</b>	
	<input type="checkbox"/> <b>CHANGE WELL TYPE</b>	
	<input type="checkbox"/> <b>DEEPEN</b>	
	<input type="checkbox"/> <b>FRACUTURE TREAT</b>	
	<input type="checkbox"/> <b>OPERATOR CHANGE</b>	
	<input type="checkbox"/> <b>NEW CONSTRUCTION</b>	
	<input checked="" type="checkbox"/> <b>PRODUCTION START OR RESUME</b>	
	<input type="checkbox"/> <b>PLUG AND ABANDON</b>	
	<input type="checkbox"/> <b>PLUG BACK</b>	
	<input type="checkbox"/> <b>REPERFORATE CURRENT FORMATION</b>	
	<input type="checkbox"/> <b>RECLAMATION OF WELL SITE</b>	
	<input type="checkbox"/> <b>RECOMPLETE DIFFERENT FORMATION</b>	
	<input type="checkbox"/> <b>TUBING REPAIR</b>	
	<input type="checkbox"/> <b>SIDETRACK TO REPAIR WELL</b>	
	<input type="checkbox"/> <b>TEMPORARY ABANDON</b>	
	<input type="checkbox"/> <b>WATER SHUTOFF</b>	
	<input type="checkbox"/> <b>VENT OR FLARE</b>	
	<input type="checkbox"/> <b>SI TA STATUS EXTENSION</b>	
	<input type="checkbox"/> <b>WILDCAT WELL DETERMINATION</b>	
	<input type="checkbox"/> <b>OTHER:</b> <input style="width: 100px;" type="text"/>	
<b>12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.</b> THE SUBJECT WELL WAS PLACED ON PRODUCTION ON MARCH 17, 2011 AT 5:20 P.M. THE CHRONOLOGICAL WELL HISTORY WILL BE SUBMITTED WITH THE WELL COMPLETION REPORT.		
<b>Accepted by the          Utah Division of          Oil, Gas and Mining          FOR RECORD ONLY</b>		
<b>NAME (PLEASE PRINT)</b> Andy Lytle	<b>PHONE NUMBER</b> 720 929-6100	<b>TITLE</b> Regulatory Analyst
<b>SIGNATURE</b> N/A	<b>DATE</b> 3/18/2011	

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

DIV. OF OIL, GAS &amp; MINING

RECEIVED

JUN 28 2012

FORM APPROVED  
OMB No. 1004-0137  
Expires: July 31, 2010

## WELL COMPLETION OR RECOMPLETION REPORT AND LOG

5. Lease Serial No.  
UTU025187

1a. Type of Well <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Dry <input type="checkbox"/> Other		6. If Indian, Allottee or Tribe Name	
b. Type of Completion <input checked="" type="checkbox"/> New Well <input type="checkbox"/> Work Over <input type="checkbox"/> Deepen <input type="checkbox"/> Plug Back <input type="checkbox"/> Diff. Resvr. Other _____		7. Unit or CA Agreement Name and No. UTU63047A	
2. Name of Operator KERR MCGREE OIL & GAS ONSHORE		8. Lease Name and Well No. NBU 1022-10G4CS ✓	
3. Address P.O. BOX 173779 DENVER, CO 80217		9. API Well No. 43-047-37168	
3a. Phone No. (include area code) Ph: 720-929-6100		10. Field and Pool, or Exploratory NATURAL BUTTES	
4. Location of Well (Report location clearly and in accordance with Federal requirements)* At surface NWSE 2136FSL 2620FEL 39.962093 N Lat, 109.425985 W Lon At top prod interval reported below SWNE 2738FNL 1825FEL At total depth SWNE 2729FNL 1808FEL BHL by HSM		11. Sec., T., R., M., or Block and Survey or Area Sec 10 T10S R22E Mer SLB	
14. Date Spudded 02/07/2011		15. Date T.D. Reached 02/26/2011	
16. Date Completed <input type="checkbox"/> D & A <input type="checkbox"/> Ready to Prod. 03/17/2011		17. Elevations (DF, KB, RT, GL)* 5067 GL	
18. Total Depth: MD 8905 TVD 8753		19. Plug Back T.D.: MD 8843 TVD 8691	
20. Depth Bridge Plug Set: MD TVD		21. Type Electric & Other Mechanical Logs Run (Submit copy of each) SCBL-BHP-HDIL/ZDL/CNGR X X X	
22. Was well cored? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (Submit analysis) Was DST run? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (Submit analysis) Directional Survey? <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes (Submit analysis)			

## 23. Casing and Liner Record (Report all strings set in well)

Hole Size	Size/Grade	Wt. (#/ft.)	Top (MD)	Bottom (MD)	Stage Cementer Depth	No. of Sk. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
20.000	14.000 STL	36.7		40		28			
12.250	8.625 IJ-55	28.0		2154		675		0	
7.875	4.500 I-80	11.6		8887		1705		340	

## 24. Tubing Record

Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)
2.375	7811							

## 25. Producing Intervals

Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A) WASATCH	5492	5502	5492 TO 5502	0.360	24	OPEN
B) MESAVERDE	6707	8292	6707 TO 8292	0.360	142	OPEN
C)						
D)						

## 26. Perforation Record

## 27. Acid, Fracture, Treatment, Cement Squeeze, Etc.

Depth Interval	Amount and Type of Material
5492 TO 8292	PUMP 7.111 BBLs SLICK H2O & 299,128 LBS 30/50 SAND.

## 28. Production - Interval A

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
03/17/2011	03/20/2011	24	→	0.0	1896.0	600.0			FLows FROM WELL
Choke Size	Tbg. Press. Flwg. 1390 SI	Csg. Press. 2054.0	24 Hr. Rate →	Oil BBL 0	Gas MCF 1896	Water BBL 600	Gas:Oil Ratio	Well Status PGW	

## 28a. Production - Interval B

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate →	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	

(See Instructions and spaces for additional data on reverse side)

ELECTRONIC SUBMISSION #106818 VERIFIED BY THE BLM WELL INFORMATION SYSTEM

\*\* OPERATOR-SUBMITTED \*\* OPERATOR-SUBMITTED \*\* OPERATOR-SUBMITTED \*\*

## 28b. Production - Interval C

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	
			→						

## 28c. Production - Interval D

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	
			→						

## 29. Disposition of Gas(Sold, used for fuel, vented, etc.)

SOLD

## 30. Summary of Porous Zones (Include Aquifers):

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

## 31. Formation (Log) Markers

Formation	Top	Bottom	Descriptions, Contents, etc.	Name	Top
					Meas. Depth
GREEN RIVER	1090	8905			
BIRD'S NEST	1407				
MAHOGANY	1897				
WASATCH	4252				
MESAVERDE	6580				

## 32. Additional remarks (include plugging procedure):

Attached is the chronological well history & final survey. Completion chrono details individual frac stages.

## 33. Circle enclosed attachments:

- |   |                    |               |                       |
|---|--------------------|---------------|-----------------------|
| 1. Electrical/Mechanical Logs (1 full set req'd.)     | 2. Geologic Report | 3. DST Report | 4. Directional Survey |
| 5. Sundry Notice for plugging and cement verification | 6. Core Analysis   | 7. Other:     |                       |

## 34. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records (see attached instructions):

**Electronic Submission #106818 Verified by the BLM Well Information System.  
For KERR MCGREE OIL & GAS ONSHORE,, sent to the Vernal**

Name (please print) ANDREW LYTLETitle REGULATORY ANALYSTSignature (Electronic Submission)Date 04/20/2011

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

**\*\* ORIGINAL \*\* ORIGINAL \*\* ORIGINAL \*\* ORIGINAL \*\* ORIGINAL \*\* ORIGINAL \*\* ORIGINAL \*\***

# US ROCKIES REGION

## Operation Summary Report

Well: NBU 1022-10G4CS	Spud Conductor: 2/7/2011	Spud Date: 2/11/2011
Project: UTAH-UINTAH	Site: NBU 1022-10G4CS	Rig Name No: PROPETRO 11/11, PIONEER 69/69
Event: DRILLING	Start Date: 1/24/2011	End Date: 3/1/2011
Active Datum: RKB @5,085.00ft (above Mean Sea Level)		
UWI: NW/SE/0/10/S/22/E/10/0/0/26/PM/S/2136/E/0/2620/0/0		

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
2/11/2011	6:00 - 17:30	11.50	MIRU	01	A	P		MOVE RIG AND ALL EQUIPMENT ONTO LOCATION, DRESS TOP OF CONDUCTOR. INSTALL DIVERTER HEAD AND BOWIE LINE. BUILD DITCH. MOVE RIG OVER HOLE AND RIG UP.. SET CATWALK AND PIPE RACKS.
	17:30 - 18:00	0.50	PRPSPD	01	B	P		RIG UP AND PRIME PIT PUMP AND MUD PUMP. P/U 1.83 DEG BENT HOUSING HUNTING MTR SN 8085 . 7/8 LOBE .17 RPM. M/U Q507 SN 7133231
	18:00 - 19:30	1.50	DRLSUR	02	A	P		2ND RUN, W/ 7-18'S. INSTALL RUBBER. SPUD SURFACE 02/11/2011 @ 17:00 HRS. DRILL 12.25" SURFACE HOLE F/40'-210' (170' @ 113'/HR)
	19:30 - 22:30	3.00	DRLSUR	06	A	P		PSI ON/ OFF 690/410, UP/ DOWN/ ROT 25/20/23. 500 GPM, 45 RPM ON TOP DRIVE, 15-18K WOB
	22:30 - 0:00	1.50	DRLSUR	02	C	P		TOOH, PU AND ORIENT DIRECTIONAL TOOLS, TIH, T/120'
2/12/2011	0:00 - 18:00	18.00	DRLSUR	02	C	P		DRILL/ SLIDE AND 12.25" SURFACE HOLE F/210'-375' (165' @ 110'/HR), PSI ON/ OFF 750/510, UP/ DOWN/ ROT 45/40/42. 550 GPM, 45 RPM ON TOP DRIVE, 18-22K WOB
	18:00 - 18:30	0.50	DRLSUR	07	A	P		DRILL 12.25" SURFACE HOLE F/375 - 1600' (1225' @ 68'/HR) PSI ON/ OFF 180/790, UP/ DOWN/ ROT 65/50/60. 500 GPM, 45 RPM ON TOP DRIVE, 18-20K WOB, CIRC RESERVE PIT, LOST TOTAL CIRC @ 1410', DRLG W/ AIREATED H2O.
	18:30 - 0:00	5.50	DRLSUR	02	C	P		SERVICE AND LUBRICATE RIG AND PUMPS
								DRILL 12.25" SURFACE HOLE F/ 1600'-1900 (300' @ 55'/HR) PSI ON/ OFF 1000/790, UP/ DOWN/ ROT 78/52/62. 500 GPM, 45 RPM ON TOP DRIVE, 18-20K WOB, CIRC RESERVE PIT, LOST TOTAL CIRC @ 1410', DRLG W/ AIREATED H2O.
2/13/2011	0:00 - 5:00	5.00	DRLSUR	02	C	P		DRILL 12.25" SURFACE HOLE F/ 1900'-2170' (270' @ 54'/HR) PSI ON/ OFF 1135/890, UP/ DOWN/ ROT 78/52/62. 500 GPM, 45 RPM ON TOP DRIVE, 18-20K WOB, CIRC RESERVE PIT, LOST TOTAL CIRC @ 1410', DRLG W/ AIREATED H2O.
	5:00 - 6:30	1.50	DRLSUR	05	F	P		CIRC AND COND HOLE CLEAN
	6:30 - 10:00	3.50	DRLSUR	06	A	P		TOOH, LDDS AND DIR BHA
	10:00 - 11:00	1.00	CSG	12	A	P		RU TO RUN SURFACE CSG, MOVE PIPE RACKS AND CATWALK, MOVE CSG OVER TO WORK AREA
	11:00 - 15:30	4.50	CSG	12	C	P		HELD SAFETY MEETING, RUN CSG. RAN 48JTS OF 8-5/8", 28#, J-55, 8 RND SURFACE CSG W/ LTC THREADS. LANDED FLOAT SHOE @ 2140.28' KB. RAN BAFFLE PLATE IN TOP OF SHOE JT LANDED 2094.43' KB. FILL CSG @ 500', 1500', AND 2140'
								RIG DOWN RIG, MOVE OUT RELEASE RIG 02/13/2011 @ 18:00 HRS

**US ROCKIES REGION**  
**Operation Summary Report**

Well: NBU 1022-10G4CS	Spud Conductor: 2/7/2011	Spud Date: 2/11/2011
Project: UTAH-UINTAH	Site: NBU 1022-10G4CS	Rig Name No: PROPETRO 11/11, PIONEER 69/69
Event: DRILLING	Start Date: 1/24/2011	End Date: 3/1/2011
Active Datum: RKB @5,085.00ft (above Mean Sea Level)	UWI: NW/SE/0/10/S/22/E/10/0/0/26/PM/S/2136/E/0/2620/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	15:30 - 21:00	5.50	CSG	12	C	P		<p>HOLD SAFETY MEETING. INSTALL CEMENT HEAD. PSI TEST TO 2000 PSI. PUMP 115 BBLS OF 8.3# H2O AHEAD. NO CIRC. PUMP 20 BBLS OF 8.4# GEL WATER AHEAD. NO CIRC. PUMP 395 SX (81 BBLS) OF 15.8# 1.15 YIELD TAIL(2% CALC, 1/4# /SK OF FLOCELE). NO CIRC. DROP PLUG ON FLY AND DISPLACE W/130 BBLS OF 8.3# H2O. LIFT PRESSURE WAS 140 PSI, DIDN'T BUMP PLUG, FLOAT HELD.</p> <p>TOP OUT, PUMP 55 SX (11.2 BBLS) OF 15.8# 1.15 YIELD TAIL(4 % CALC, 1/4# /SK OF FLOCELE) CMT FELL, WAIT TWO HRS PUMP 100SX (20.5 BBLS) OF 15.8# 1.15 YIELD TAIL(4 % CALC, 1/4# /SK OF FLOCELE).WAIT TWO HRS PUMP 125SX (25.6 BBLS) OF 15.8# 1.15 YIELD TAIL(4 % CALC, 1/4# /SK OF FLOCELE)"NO CMT TO SURFACE" HAD PETE MARTIN TOP OFF SURFACE CMT W/ 176 SX (36 BBLS) OR TAIL CMT. RIG DOWN CEMENTERS AND RELEASE CEMENTERS 20:55</p> <p>CONDUCTOR CASING: Cond. Depth set: 40' Cement sx used: 28</p> <p>SPUD DATE/TIME: 2/11/2011 17:00</p> <p>SURFACE HOLE: Surface From depth: 40' Surface To depth: 2,170 Total SURFACE hours: 31.5 Surface Casing size: 8.625" # of casing joints ran: 48 Casing set MD: 2140.58 # sx of cement: 395/280 Cement blend (ppg:) 15.8/15.8 Cement yield (ft3/sk): 1.15/1.15 # of bbls to surface: 0 Describe cement issues: NONE Describe hole issues: LOST TOTAL CIRC # 1410'</p>
2/19/2011	7:00 - 18:00	11.00	DRLPRO	01	A	P		RD ALL RIG EQUIPMENT FOR MOBILIZATION. WE HAD A SNOW STORM AND 10 MILES OF ROUGH ROAD. WE GOT ALL BUT 6 LOADS MOVED CLOSE TO THE LOCATION. WE WILL CONTINUE TOMORROW. THERE WILL BE 1 BLADE ON EACH END TO ASSIST TRUCKS. WE WILL SPOT THE SUB 1ST THING I THE MORNING.
2/20/2011	0:00 - 6:00	6.00	DRLPRO	21	C	S		WAITING ON DAYLIGHT TO BEGIN RIGGING UP
	6:00 - 14:00	8.00	DRLPRO	01	A	P		MOVE IN EQUIPMENT. SET/LEVEL SUB, COOLING TOWER, MUD FLOAT, CARRIER. SET IN BACK YARD, RAISE THE DERRICK. 11 TRUCKS, 1 CRANE, 2 FORKLIFTS AND 2 BLADES. TRUCKS AND CRANE ARRIVED @ 07:00. LAST TRUCK LEFT @ 12:30. CRANE LEFT @ 14:00.
	14:00 - 22:00	8.00	DRLPRO	01	B	P		RURT, FLOOR, GASBUSTER, FLARE LINES, PITS, PUMPS, BOILER. ROTARY, STEAM ELECTRIC LINES, WATER LINES
	22:00 - 0:00	2.00	DRLPRO	14	A	P		NU BOP AND CHOKE
2/21/2011	0:00 - 0:30	0.50	DRLPRO	14	A	P		NU THE BOP

**US ROCKIES REGION**  
**Operation Summary Report**

Well: NBU 1022-10G4CS		Spud Conductor: 2/7/2011		Spud Date: 2/11/2011	
Project: UTAH-UINTAH		Site: NBU 1022-10G4CS		Rig Name No: PROPETRO 11/11, PIONEER 69/69	
Event: DRILLING		Start Date: 1/24/2011		End Date: 3/1/2011	
Active Datum: RKB @5,085.00ft (above Mean Sea Level)		UWI: NW/SE/0/10/S/22/E/10/0/0/26/PM/S/2136/E/0/2620/0/0			

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	0:30 - 4:00	3.50	DRLPRO	15	A	P		HELD A SAFETY MEETING W/ B&C QUICKTEST. RAN KOOMY FUNCTION TEST. RU AND STARTED TESTING. TESTED THE UPPER/LOWER KELLY VALVES, FLOOR VALVE, DART VALVE, 250#/5 MIN AND 5000#/10 MIN
	4:00 - 5:00	1.00	DRLPRO	15	A	Z		TEST MANIFLOD VALVES TO 250#/5 MIN AND 5000#/10 MIN
	5:00 - 6:00	1.00	DRLPRO	14	A	Z		ND THE BOP AND REPLACE THE O-RING. 1ST ONE WAS SPLIT.
	6:00 - 8:30	2.50	DRLPRO	15	A	Z		TESTED THE BLIND RAMS, PIPE RAMS, KILL LINE,HCR, INNER/OUTER BOP VALVES TO 500#/5 MIN AND 5000#/10 MIN. TESTED THE ANNULAR TO 250#/5 MIN AND 2500#/10 MIN. TESTED THE SURFACE CASING TO 1500 PSI FOR 30 MIN.
	8:30 - 9:00	0.50	DRLPRO	14	B	P		INSTALL THE WEAR BUSHING
	9:00 - 14:00	5.00	DRLPRO	06	A	P		SAFETY MEETING, RU KIMSEY PU BHA SCRIBE THE ASSY. AND PU DP TO 2030'
	14:00 - 15:00	1.00	DRLPRO	14	B	P		INSTALL THE ROTATING HEAD AND DRIVE BUSHINGS.
	15:00 - 17:00	2.00	DRLPRO	02	F	P		TAGGED CEMENT @ 2095' DRILLED CEMENT AND FLOAT EQUIP.
	17:00 - 0:00	7.00	DRLPRO	02	D	P		DRILL F/ 2184'-2666',482'/7HR, 68.9'/HR SLIDING 16% WOB 18-20, RPM 50-60, MMRPM 91, SPM 115, GPM 454, UP/SO/ROT90/70/79, ON/OFF 1120/820, DIFF 200-450, WATER
2/22/2011	0:00 - 6:00	6.00	DRLPRO	02	D	P		DRILL F/ 2666'-3140',474'/6HR, 79'/HR SLIDING 16-18% WOB 230-22K, RPM 50-60, MMRPM 91, SPM 115, GPM 454, UP/SO/ROT 90/70/79, ON/OFF 1120/820, DIFF 200-450, WATER
	6:00 - 13:30	7.50	DRLPRO	02	D	P		DRILL F/ 3140'-3837',697'/7.5HR, 92.9'/HR SLIDING 16-18% WOB20-22K, RPM 50-60, MMRPM 91, SPM 115, GPM 454, UP/SO/ROT 130/100/109 ON/OFF 1150/860, DIFF 200-400, WATER
	13:30 - 14:00	0.50	DRLPRO	07	A	P		RIG SERVICE
	14:00 - 0:00	10.00	DRLPRO	02	D	P		DRILL F/ 3837'- 4564',727'/7.5HR, 96.9'/HR SLIDING 8% WOB 20-22K, RPM 50-60, MMRPM 91, SPM 115, GPM 454, UP/SO/ROT 135/85/110 ON/OFF 1400/980, DIFF 300-450, WATER
2/23/2011	0:00 - 6:00	6.00	DRLPRO	02	D	P		DRILL F/ 4564'- 5070',436'/6HR, 72.7'/HR SLIDING 10% WOB 20-22K, RPM 50-60, MMRPM 91, SPM 115, GPM 454, UP/SO/ROT 135/85/110 ON/OFF 1400/980, DIFF 300-450, 34/VIS, 9.3/WT.
	6:00 - 13:00	7.00	DRLPRO	02	D	P		DRILL F/ 5070'-5639',569'/7HR, 81.3'/HR SLIDING 3% WOB 22-25K, RPM 50-60, MMRPM 91, SPM 115, GPM 454, UP/SO/ROT 190/93/130 ON/OFF 1675/1300, DIFF 300-450, 34/VIS, 9.5/WT.
	13:00 - 13:30	0.50	DRLPRO	07	A	P		RIG SERVICE,FUNCTION TEST BOP, DERRICK STILL LEVEL
	13:30 - 0:00	10.50	DRLPRO	02	D	P		DRILL F/ 5639'-6208',569'/10.5HR, 54.2'/HR SLIDING 3% WOB 23-25K, RPM 50-60, MMRPM 91, SPM 115, GPM 454, UP/SO/ROT 185/100/132 ON/OFF 1690/1415, DIFF 300-400, 35/VIS, 9.4/WT.
2/24/2011	0:00 - 6:00	6.00	DRLPRO	02	D	P		DRILL F/ 6208'-6524',316'/6HR, 52.5'/HR SLIDING 3% WOB 23-25K, RPM 50-60, MMRPM 91, SPM 120, GPM 454, UP/SO/ROT 185/100/132 ON/OFF 1690/1415, DIFF 300-400, 35/VIS, 9.6/WT.
	6:00 - 15:00	9.00	DRLPRO	02	D	P		DRILL F/ 6524'-6966',442'/9HR,49.1'/HR SLIDING 8% WOB 23-25K, RPM 50-60, MMRPM 91, SPM 120, GPM 454, UP/SO/ROT 212/105/146 ON/OFF 1957/1574, DIFF 300-400, 36/VIS, 10.0/WT
	15:00 - 15:30	0.50	DRLPRO	07	A	P		RIG SERVICE

**US ROCKIES REGION**  
**Operation Summary Report**

Well: NBU 1022-10G4CS	Spud Conductor: 2/7/2011	Spud Date: 2/11/2011
Project: UTAH-UINTAH	Site: NBU 1022-10G4CS	Rig Name No: PROPETRO 11/11, PIONEER 69/69
Event: DRILLING	Start Date: 1/24/2011	End Date: 3/1/2011
Active Datum: RKB @5,085.00ft (above Mean Sea Level)		UWI: NW/SE/0/10/S/22/E/10/0/0/26/PM/S/2136/E/0/2620/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
2/25/2011	15:30 - 0:00	8.50	DRLPRO	02	D	P		DRILL F/6966'-7345',379'/8.5HR,44.6'/HR SLIDING 8% WOB 23-25K, RPM 50-60, MMRPM 91, SPM 120, GPM 454, UP/SO/ROT 215/100/149 ON/OFF 1960/1720, DIFF200-350, 36/VIS, 10.2/WT
	0:00 - 6:00	6.00	DRLPRO	02	D	P		DRILL F/7345'-7598',253'/6HR,42.2'/HR SLIDING 8% WOB 23-25K, RPM 50-60, MMRPM 91, SPM 120, GPM 454, UP/SO/ROT 215/100/149 ON/OFF 1960/1720, DIFF200-350, 36/VIS, 10.6/WT
	6:00 - 14:30	8.50	DRLPRO	02	D	P		DRILL F/7598'-7883',285'/8.5HR,33.5'/HR SLIDING 10% WOB 23-25K, RPM 50-60, MMRPM 91, SPM 120, GPM 454, UP/SO/ROT 220/110/153 ON/OFF 2105/1820, DIFF200-350, 36/VIS, 11.0/WT
	14:30 - 15:00	0.50	DRLPRO	07	A	P		RIG SERVICE
	15:00 - 0:00	9.00	DRLPRO	02	D	P		DRILL F/7883'-8262',379'/8.5HR,42.1'/HR,ROT OUT, WOB 23-25K, RPM 50-60, MMRPM 91, SPM 120, GPM 454, UP/SO/ROT 235/115/155 ON/OFF 2250/2000, DIFF200-350, 36/VIS, 11.5/WT
2/26/2011	0:00 - 6:00	6.00	DRLPRO	02	D	P		DRILL F/ 8262'-8452',190'/6HR,31.6'/HR,ROT OUT, WOB 23-25K, RPM 50-60, MMRPM 91, SPM 120, GPM 454, UP/SO/ROT 245/118/157 ON/OFF 2350/2100, DIFF200-350, 36/VIS, 11.9/WT HAD A 15' FLARE @ 8410'
	6:00 - 15:30	9.50	DRLPRO	02	D	P		DRILL F/ 8452'-8831',379'/9.5HR,39.9'/HR,ROT OUT, WOB 23-25K, RPM 50-60, MMRPM 91, SPM 120, GPM 454, UP/SO/ROT 260/122/161 ON/OFF 2480/2280, DIFF200-350, 36/VIS, 12.5/WT
	15:30 - 16:00	0.50	DRLPRO	07	A	P		RIG SERVICE
	16:00 - 18:30	2.50	DRLPRO	02	D	P		DRILL F/ 8831'-8905',73'/2.5HR,29.2'/HR,ROT OUT, WOB 23-25K, RPM 50-60, MMRPM 91, SPM 120, GPM 454, UP/SO/ROT 260/122/161 ON/OFF 2480/2280, DIFF200-350, 36/VIS, 12.5/WT
	18:30 - 20:30	2.00	DRLPRO	05	C	P		CIRC/COND BEFORE WIPER TRIP. PUMP A 40 BBL. 14.5# PILL
2/27/2011	20:30 - 0:00	3.50	DRLPRO	06	E	P		WIPER TRIP TO THE CASING SHOE. 80-100K OVERPULL OFF BOTTOM. THERE WERE A FEW LITTLE SPOTS THAT DRUG, OVERALL THE HOLE WAS IN GOOD SHAPE.
	0:00 - 1:00	1.00	DRLPRO	06	E	P		TOH, WIPER TRIP TO THE SHOE
	1:00 - 3:00	2.00	DRLPRO	09	A	P		CUT AND SLIP 120' OF DRILLING LINE
	3:00 - 7:00	4.00	DRLPRO	06	E	P		TIH FILL PIPE AT THE SHOE AND 5500'.HAD A TIGHT SPOT AT 7160'
	7:00 - 9:00	2.00	DRLPRO	05	C	P		CIRC/COND. MUD FOR LOGS. 10' FLARE ON BOTTOMS UP. 45/VIS 12.6/MW
2/28/2011	9:00 - 15:30	6.50	DRLPRO	06	B	P		TOH AND STAND BACK FOR LOGS. TIGHT @ 6750'/4850'
	15:30 - 19:00	3.50	DRLPRO	11	D	P		HELD A S/M RU BAKER ATLAS AND RAN TRIPLE COMBO LOG. DRILLERS TD 8905' LOG STOPPED AT 6601'. RD BAKER ATLAS
	19:00 - 23:00	4.00	DRLPRO	11	E	P		S/M AND RU WEATHERFORD WIRELINE TO RUN THE 60 FINGER CASING CALIPER LOG. NO NOTICABLE DAMAGE TO THE CASING.
	23:00 - 0:00	1.00	DRLPRO	14	B	P		PULLED THE OLD WEAR BUSHING AND INSTALLED THE NEW WEAR BUSHING. BUSHING ID 8".
	0:00 - 7:00	7.00	DRLPRO	06	B	X		TIH FILL PIPE @ BHA, SHOE AND 5500'. HAD A BRIDGE AT 2560'
2/28/2011	7:00 - 10:00	3.00	DRLPRO	05	C	X		CIRC. PUMPED SWEEPS, MIXED AND PUMPED. A 540 BBL. 14.2PPG SLUG
	10:00 - 18:30	8.50	DRLPRO	06	B	X		TOH LDDP TO LOG.LD BHA BROKE KELLY
	18:30 - 19:00	0.50	DRLPRO	14	B	P		PULLED THE WEAR BUSHING. NO WEAR 8" ID

**US ROCKIES REGION**  
**Operation Summary Report**

Well: NBU 1022-10G4CS		Spud Conductor: 2/7/2011		Spud Date: 2/11/2011	
Project: UTAH-UINTAH		Site: NBU 1022-10G4CS		Rig Name No: PROPETRO 11/11, PIONEER 69/69	
Event: DRILLING		Start Date: 1/24/2011		End Date: 3/1/2011	
Active Datum: RKB @5,085.00ft (above Mean Sea Level)		UWI: NW/SE/0/10/S/22/E/10/0/0/26/PM/S/2136/E/0/2620/0/0			

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	19:00 - 19:00	0.00	DRLPRO	11	D	P		S/M WITH BAKER ATLAS. RIG UP LOGGERS AND RUN TRIPLE COMBO LOG. DRILLERS TD 8905'/ LOGGERS TD 8902'.
3/1/2011	0:00 - 8:30	8.50	DRLPRO	12	C	P		SM RU UP KIMSEY CASING AND RUN 210 JTS. OF 4 1/2" 11.6#/ BTC/I-80 CASING + 2 MARKERS. LANDED @ 8887'. SHOE/8885.5', FC/8841.87', MARKERS @ 6545.81'-6566.96 AND 4207.72'-4228.38'. BROKE CIRC @ JTS 20/50/100/150/200/210
	8:30 - 10:00	1.50	DRLPRO	05	D	P		CIRC @ 85 STKS 600 PSI RD KIMSEY LD TRUCK AND CASING CREW. RU BJ TO CEMENT
	10:00 - 12:30	2.50	DRLPRO	12	E	P		SAFETY MEETING. PUT BJ ONLINE AND PUMP 40 BBL. SPACER FOLLOWED BY 538 SKS (189.7 BBL) LEAD 12.5 PPG, 1.98 YLD. 1167 SKS(272.3 BBL) OF TAIL 14.3 PPG, 1.31 YLD. DISPLACED W/ 137.5 BBL. OF CLAYTREAT WATER. FINAL LIFT PRESSURE 2950# BUMPED PLUG W/ 3610# PD @ 3/1/2011 12:25. HELD PRESSURE FOR 5 MIN. 1.5 BBL BACK TO THE TRUCK. WE HAD 35 BBL. OF SPACER TO SURFACE. ESTIMATED TOC 125'
	12:30 - 16:30	4.00	DRLPRO	14	A	P		SET THE SLIPS W/ 87K. ND BOP, CUT OFF CASING AND CLEAN PITS. RIG RELEASED 3/1/2011 16:30

**US ROCKIES REGION**  
**Operation Summary Report**

Well: NBU 1022-10G4CS	Spud Conductor: 2/7/2011	Spud Date: 2/11/2011
Project: UTAH-UINTAH	Site: NBU 1022-10G4CS	Rig Name No: PROPETRO 11/11, PIONEER 69/69
Event: DRILLING	Start Date: 1/24/2011	End Date: 3/1/2011
Active Datum: RKB @5,085.00ft (above Mean Sea Level)		UWI: NW/SE/0/10/S/22/E/10/0/0/26/PM/S/2136/E/0/2620/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	16:30 - 16:30	0.00	DRLPRO					<p>CONDUCTOR CASING: Cond. Depth set: 44 Cement sx used: 25</p> <p>SPUD DATE/TIME:</p> <p>SURFACE HOLE: Surface From depth: 18 Surface To depth: 2,184 Total SURFACE hours: 31.50 Surface Casing size: 8 5/8 # of casing joints ran: 48 Casing set MD: 2,140.0 # sx of cement: 395/55/100/125 Cement blend (ppg): 15.8 Cement yield (ft3/sk): 1.15 # of bbis to surface: Describe cement issues: Describe hole issues:</p> <p>PRODUCTION: Rig Move/Skid start date/time: 2/19/2011 7:00 Rig Move/Skid finish date/time: 2/20/2011 12:30 Total MOVE hours: 29.5 Prod Rig Spud date/time: 2/21/2011 15:00 Rig Release date/time: Total SPUD to RR hours:-974295.0 Planned depth MD 8,890 Planned depth TVD 8,736 Actual MD: 8,905 Actual TVD: 8,753 Open Wells \$: \$861,225 AFE \$: \$825,978 Open wells \$/ft: \$96.71</p> <p>PRODUCTION HOLE: Prod. From depth: 2,184 Prod. To depth: 8,905 Total PROD hours: 119 Log Depth: 8902 Float Collar Top Depth: 8841.87 Production Casing size: 4 1/2 # of casing joints ran: 212 Casing set MD: 8,887.0 Stage 1 # sx of cement: 538 Cement density (ppg): 12.5 Cement yield (ft3/sk): 1.98 Stage 2 # sx of cement: 1,167 Cement density (ppg): 14.3 Cement yield (ft3/sk): 1.31 Top Out Cmt # sx of cement: Cement density (ppg): Cement yield (ft3/sk): Est. TOC (Lead &amp; Tail) or 2 Stage : Describe cement issues: Describe hole issues:</p> <p>DIRECTIONAL INFO: KOP: 18 Max angle: 23.73 Departure: 1007.45 Max dogleg MD: 2.72</p>

**US ROCKIES REGION**  
**Operation Summary Report**

Well: NBU 1022-10G4CS		Spud Conductor: 2/7/2011		Spud Date: 2/11/2011	
Project: UTAH-UINTAH		Site: NBU 1022-10G4CS		Rig Name No: ROYAL WELL SERVICE 1/1	
Event: COMPLETION		Start Date: 3/14/2011		End Date: 3/17/2011	
Active Datum: RKB @5,085.00ft (above Mean Sea Level)		UWI: NW/SE/0/10/S/22/E/10/0/0/26/PM/S/2136/E/0/2620/0/0			

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
3/14/2011	7:00 - 7:15	0.25		48				HSM WEARING SEAT BELTS & DRIVING WITH HEADLIGHTS ON.
	7:15 - 17:00	9.75		30				MIRU, SPOT EQUIP, NDWH, NUBOP, PU 3 7/8" FLOW TECH MILL, TALLY & RIH WITH 230 JTS TBG TO 8842'. REV CIRC WELL CLEAN WITH 65 BBLS TMAC, POOH WITH TBG, SWI, SDFN.
3/15/2011	7:00 - 7:15	0.25		48				HSM DRK SAFETY-FALL PROTECTION
	7:15 - 15:00	7.75		30				NDBOP,NU FRAC VALVE, RU B&C QUICKTEST, PRESS TEST CASING & FRAC VALVE TO 500#, 2,500#, & 7,000#, PRESS TEST SURFACE CASING TO 200#, RD B&C QUICKTEST, RU CASED HOLE SOLUTIONS, RIH WITH 3 3/8" EXP GNS, 23 GM, 0.36" HOLE & PERF THE M.V. @ 8291-92', 3 SPF, 8252-53', 4 SPF, 8243-44', 4 SPF, 8217-19', 3SPF, 8186-87', 4 SPF, 8154-55', 3 SPF, 24 HOLES. RD CASED HOLE SOLUTIONS, SWI, SDFN.
3/16/2011	6:30 - 7:00	0.50	COMP	48		P		HSM & JSA, MIRU FRAC TECH & CASED HOLE SOLUTIONS
	7:00 - 8:46	1.77	COMP	46	E	Z		PLUGGED LINE ON ACID TRUCK
	8:46 - 9:45	0.98	COMP	36	B	P		08:46 OPEN WELL FRAC STG 1) WHP 1047 PSI, BRK DWN 4.3 BPM @ 3885 PSI. ISIP2726 PSI, FG 0.76, PMP 6 BBLS 15% HCL, PMP 126 BBLS 10/M SCALE INHIBITOR. PUMP 328 BBLS @ 51 BPM @ 5700 PSI, 24/24 PERFS OPEN = 100%
	9:58 - 10:45	0.78	COMP	37	B	P		MP 6,610PSI, MR 53.5 BPM, AP 4,175 PSI, AR 50.5 BPM, ISIP 2,885 PSI, FG 0.78, NPI 159 PSI. PMP2,721 BBLS SW & 99,543 LBS OF 30/50 SLD & 5,000 LBS OF 20/40 SLC SLD. TOTAL PROP 104,543 LBS, SWI. 09:45 X-OVER FOR WL. PERF STG 2) PU 4 1/2 8K HAL CBP & 3 3/8 EXP GUN, 23 GM, 0.36 HOLE SIZE. 90 & 120 DEG PHASING. RIH SET CBP @ 8,127, P/U & PERF MV F/ 8,096-97, 4 SPF, 4 HOLES. 8,081-82, 4 SPF, 4 HOLES. 8,013-14, 3 SPF, 3 HOLES. 7,963-64, 4 SPF, 4 HOLES. 7,895-96, 3 SPF, 3 HOLES. 7,842-44, 3 SPF, 6 HOLES. 24 HOLES. POOH, X-OVER FOR FRAC CREW.

**US ROCKIES REGION**  
**Operation Summary Report**

Well: NBU 1022-10G4CS		Spud Conductor: 2/7/2011	Spud Date: 2/11/2011
Project: UTAH-UINTAH		Site: NBU 1022-10G4CS	Rig Name No: ROYAL WELL SERVICE 1/1
Event: COMPLETION		Start Date: 3/14/2011	End Date: 3/17/2011
Active Datum: RKB @5,085.00ft (above Mean Sea Level)		UWI: NW/SE/0/10/S/22/E/10/0/0/26/PM/S/2136/E/0/2620/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	11:01 - 11:50	0.82	COMP	36	B	P		11:01 OPEN WELL FRAC STG 2) WHP 745 PSI, BRK DWN 1.7 BPM @ 6,551 PSI. ISIP 2,584 PSI, FG 0.76. PUMP 158 BBLs @ 50.8 BPM @ 5,741 PSI. 24/24 PERFS OPEN = 100%  STG WAS HARD TO BRK DWN, HAD TO GO TO 7,071 PSI & SHUT DWN. HAD TO PUMP ADDITIONAL 3 BBLs ACID @ LOWER RATE TO BRK.  MP 7,071 PSI, MR 53.3 BPM, AP 4,675 PSI, AR 51.75 BPM, ISIP 2,584 PSI, FG 0.76, NPI 71 PSI. PMP 1,311 BBLs SW & 43,853 LBS OF 30/50 SLD & 5,000 LBS OF 20/40 SLC SLD. TOTAL PROP 48,853 LBS, SWI, 11:50 X-OVER FOR WL. PERF STG 3) PU 4 1/2 8K HAL CBP & 3 3/8 EXP GUN, 23 GM, 0.36 HOLE SIZE. 90 & 120 DEG PHASING. RIH SET CBP @ 7,596, P/U & PERF MV F/ 7,544-46, 3 SPF, 6 HOLES. 7,432-33, 4 SPF, 4 HOLES. 7,395-96, 4 SPF, 4 HOLES. 7,334-36, 4 SPF, 8 HOLES. 22 HOLES. POOH, X-OVER FOR FRAC CREW.
	12:00 - 12:43	0.72	COMP	37	B	P		12:53 OPEN WELL FRAC STG 3) WHP 290 PSI, BRK DWN 4.4 BPM @ 6,019 PSI. ISIP 2,270 PSI, FG 0.74. PUMP 87 BBLs @ 52.6 BPM @ 5,995 PSI. 22/22 PERFS OPEN = 100%  MP 6,912 PSI, MR 53.7 BPM, AP 5,250 PSI, AR 51.8 BPM, ISIP 2,842 PSI, FG 0.82, NPI 572 PSI. PMP 667 BBLs SW & 17,787 LBS OF 30/50 SLD & 5,000 LBS OF 20/40 SLC SLD. TOTAL PROP 22,787 LBS, SWI, 13:17 X-OVER FOR WL. PERF STG 4) PU 4 1/2 8K HAL CBP & 3 3/8 EXP GUN, 23 GM, 0.36 HOLE SIZE. 90 DEG PHASING. RIH SET CBP @ 7,334, P/U & PERF MV F/ 7,112-14, 4 SPF, 8 HOLES. 7,048-50, 4 SPF, 8 HOLES. 7,024-26, 4 SPF, 8 HOLES. 24 HOLES. POOH, X-OVER FOR FRAC CREW.
	12:53 - 13:17	0.40	COMP	36	B	P		14:17 OPEN WELL FRAC STG 4) WHP 225 PSI, BRK DWN 4.5 BPM @ 3,618 PSI. ISIP 1,295 PSI, FG 0.62. PUMP 124 BBLs @ 49.8 BPM @ 4,310 PSI. 24/24 PERFS OPEN = 100%  MP 4,760 PSI, MR 50.9 BPM, AP 3,600 PSI, AR 50 BPM, ISIP 2,312 PSI, FG 0.76, NPI 1,017 PSI. PMP 900 BBLs SW & 29,207 LBS OF 30/50 SLD & 5,000 LBS OF 20/40 SLC SLD. TOTAL PROP 34,207 LBS, SWI, 14:42 X-OVER FOR WL. PERF STG 5) PU 4 1/2 8K HAL CBP & 3 3/8 EXP GUN, 23 GM, 0.36 HOLE SIZE. 90 DEG PHASING. RIH SET CBP @ 6,980, P/U & PERF MV F/ 6,948-50, 4 SPF, 8 HOLES. 6,900-02, 4 SPF, 8 HOLES. 6,874-76, 4 SPF, 8 HOLES. 24 HOLES. POOH, X-OVER FOR FRAC CREW.
	13:23 - 14:11	0.80	COMP	37	B	P		
	14:17 - 14:42	0.42	COMP	36	B	P		
	14:45 - 15:27	0.70	COMP	37	B	P		

**US ROCKIES REGION**  
**Operation Summary Report**

Well: NBU 1022-10G4CS	Spud Conductor: 2/7/2011	Spud Date: 2/11/2011
Project: UTAH-UINTAH	Site: NBU 1022-10G4CS	Rig Name No: ROYAL WELL SERVICE 1/1
Event: COMPLETION	Start Date: 3/14/2011	End Date: 3/17/2011
Active Datum: RKB @5,085.00ft (above Mean Sea Level)		UWI: NW/SE/0/10/S/22/E/10/0/0/26/PM/S/2136/E/0/2620/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	15:31 - 15:31	0.00	COMP	36	B	P		15:31 OPEN WELL FRAC STG 5) WHP 1,614 PSI, BRK DWN 4.6 BPM @ 2,424 PSI. ISIP 1,224 PSI, FG 0.61. PUMP 110 BBLs @ 50.7 BPM @ 4,263 PSI. 24/24 PERFS OPEN = 100%  MP 4,541 PSI, MR 51.8 BPM, AP 3,750 PSI, AR 50.7 BPM, ISIP 2,235 PSI, FG 0.76, NPI 1011 PSI. PMP 802 BBLs SW & 24,896 LBS OF 30/50 SLD & 5,000 LBS OF 20/40 SLC SLD. TOTAL PROP 29,896 LBS, SWI. 15:56 X-OVER FOR WL. PERF STG 6) PU 4 1/2 8K HAL CBP & 3 3/8 EXP GUN, 23 GM, 0.36 HOLE SIZE. 120 DEG PHASING. RIH SET CBP @ 6,836, P/U & PERF MV F/ 6,804-06, 3 SPF, 6 HOLES. 6,766-69, 3 SPF, 9 HOLES. 6,707-10, 3 SPF, 9 HOLES. 24 HOLES. POOH, X-OVER FOR FRAC CREW.
	15:31 - 16:49	1.30	COMP	37	B	P		16:53 OPEN WELL FRAC STG 6) WHP 1,117 PSI, BRK DWN 4.7 BPM @ 1,821 PSI. ISIP 1,537 PSI, FG 0.66. PUMP 110 BBLs @ 51.1 BPM @ 3,760 PSI. 24/24 PERFS OPEN = 100%  MP 4,517 PSI, MR 52 BPM, AP 3,350 PSI, AR 51 BPM, ISIP 1,975 PSI, FG 0.73, NPI 438 PSI. PMP 813 BBLs SW & 25,354 LBS OF 30/50 SLD & 5,000 LBS OF 20/40 SLC SLD. TOTAL PROP 30,354 LBS, SWI. 17:17 X-OVER FOR WL. PERF STG 7) PU 4 1/2 8K HAL CBP & 3 3/8 EXP GUN, 23 GM, 0.36 HOLE SIZE. 90 DEG PHASING. RIH SET CBP @ 5,552, P/U & PERF WA F/ 5,498-5502, 4 SPF, 16 HOLES. 5492-94, 4 SPF, 8 HOLES. 24 HOLES. POOH, X-OVER FOR FRAC CREW.
	16:53 - 17:17	0.40	COMP	36	B	P		18:06 OPEN WELL FRAC STG 7) WHP 213 PSI, BRK DWN 4.4 BPM @ 2,454 PSI. ISIP 976 PSI, FG 0.61. PUMP 93 BBLs @ 51.6 BPM @ 2,838 PSI. 24/24 PERFS OPEN = 100%  18:15 279 BBL PMPD, SD, DRAIN VALVE ON SUCTION PUMP, DWN 3 MIN. 5,160# SAND PMPD.  MP 2873 PSI, MR 52.4 BPM, AP 2500 PSI, AR 43 BPM, ISIP 976 PSI, FG 0.00, NPI 000 PSI. PMP 949 BBLs SW & 23,488 LBS OF 30/50 SLD & 5,000 LBS OF 20/40 SLC SLD. , SWI, 18:31 X-OVER FOR WL.
	17:21 - 18:01	0.67	COMP	37	B	P		Total Proppant: 299128 Total Slickwater: 8163 KILL PLG) PU 4 1/2 8K HALCO CBP, RIH SET CBP @ 5,426. POOH & LD TOOLS. SWI - RD CASEHOLE SOLUTIONS WL & FRAC TECH.
	18:06 - 18:31	0.42	COMP	36	B	P		20:00 SDFN. PREP WELL TO RIH W/BHA & D/O CBPs. HSM & JSA W/RIG CREW.
3/17/2011	6:45 - 7:00	0.25	COMP	48		P		

**US ROCKIES REGION**  
**Operation Summary Report**

Well: NBU 1022-10G4CS	Spud Conductor: 2/7/2011	Spud Date: 2/11/2011
Project: UTAH-UINTAH	Site: NBU 1022-10G4CS	Rig Name No: ROYAL WELL SERVICE 1/1
Event: COMPLETION	Start Date: 3/14/2011	End Date: 3/17/2011
Active Datum: RKB @5,085.00ft (above Mean Sea Level)	UWI: NW/SE/0/10/S/22/E/10/0/0/26/PM/S/2136/E/0/2620/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	7:00 - 17:00	10.00	COMP	30				<p>WHP = 0 PSI. RIH W/167 JTS (5374') NEW 2 3/8" 4.7# J-55 TBG. RU PWR SWVL &amp; PMP. EST CIRC. PT BOP TO 3000 PSI. TAG FILL @ 5415'. C/O 14' OF SDN.</p> <p>CBP #1) DRLG OUT HALCO 8K CBP @ 5426' IN 8 MIN. 100 DIFF PSI. RIH TAG FILL @ 5552. C/O 0 OF SDN. FCP = 100 PSI.</p> <p>CBP #2) DRLG OUT HALCO 8K CBP @ 5552' IN 11 MIN. 0 DIFF PSI. RIH TAG FILL @ 6818'. C/O 18 OF SDN. FCP = 45 PSI.</p> <p>CBP #3) DRLG OUT HALCO 8K CBP @ 6836' IN 7 MIN. 150 DIFF PSI. RIH TAG FILL @ 6967. C/O 16 OF SDN. FCP = 65 PSI.</p> <p>CBP #4) DRLG OUT HALCO 8K CBP @ 6983' IN 9 MIN. 200 DIFF PSI. RIH TAG FILL @ 7144. C/O 28 OF SDN. FCP = 30 PSI.</p> <p>CBP #5) DRLG OUT HALCO 8K CBP @ 7172' IN 7 MIN. 0 DIFF PSI. RIH TAG FILL @ 7550. C/O 54 OF SDN. FCP = 95 PSI.</p> <p>CBP #6) DRLG OUT HALCO 8K CBP @ 7,604' IN 13 MIN. 200 DIFF PSI. RIH TAG FILL @ 8,090'. C/O 34 OF SDN. FCP = 120 PSI.</p> <p>CBP #7) DRLG OUT HALCO 8K CBP @ 8,124 IN 13 MIN. 400 DIFF PSI. RIH &amp; TAG FILL @ 8,702'. C/O TO 8,842'. PBTD @ 8842. FCP = 270 PSI. CIRC WELL CLEAN.</p> <p>ND PWR SWVL, NU TBG EQUIP. LD 33 JTS ON FLOAT, (47 TOTAL ON FLAOT). LND TBG ON HNGR W/247 JTS NEW 2 3/8" 4.7# J-55. RD FLOOR &amp; TBG EQUIP. ND BOP, DROP BALL, NUWH. PMP OFF BIT @ 1300 PSI w/45 BBL. WAIT 30 MIN FOR BIT TO FALL TO BTM. TURN WELL TO F.B.C.</p> <p>KB 18' HANGER 0.83' XN NIPPLE 1.1' TBG 247 JTS = 7790.93' XN NIPPLE @ 7792.86' EOT @ 7810.86' (294 JTS DLVRD - 47 JTS RTND)</p> <p>TWTR = 8,761 BBLS TWR = 1,780 BBLS TWLTR = 6,981 SICP = 1075 PSI, SITP = 0 PSI. WELL TURNED TO SALES @ 1720 HR ON 3/17/11 - 640 MCFD, 1920 BWPD, CP 1500#, FTP 100#, CK 20/64"</p>
	14:55 - 17:20	2.42	PROD	50				<p>7 AM FLBK REPORT: CP 2200#, TP 1650#, 20/64" CK, 65 BWPH, 1 CUP SAND, - GAS TTL BBLS RECOVERED: 2720 BBLS LEFT TO RECOVER: 6041</p>
3/18/2011	7:00 -			33	A			

**US ROCKIES REGION**  
**Operation Summary Report**

Well: NBU 1022-10G4CS			Spud Conductor: 2/7/2011			Spud Date: 2/11/2011		
Project: UTAH-UINTAH			Site: NBU 1022-10G4CS			Rig Name No: ROYAL WELL SERVICE 1/1		
Event: COMPLETION			Start Date: 3/14/2011			End Date: 3/17/2011		
Active Datum: RKB @5,085.00ft (above Mean Sea Level)			UWI: NW/SE/0/10/S/22/E/10/0/0/26/PM/S/2136/E/0/2620/0/0					
Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
3/19/2011	7:00 -			33	A			7 AM FLBK REPORT: CP 2275#, TP 1575#, 20/64" CK, 25 BWPH, MED SAND, - GAS TTL BBLS RECOVERED: 3380 BBLS LEFT TO RECOVER: 5381
3/20/2011	7:00 -			33	A			7 AM FLBK REPORT: CP 2050#, TP 1375#, 20/64" CK, 25 BWPH, MED SAND, - GAS TTL BBLS RECOVERED: 3980 BBLS LEFT TO RECOVER: 4781
	7:00 -			50				WELL IP'D ON 3/20/11- 1896 MCFD, 0 BOPD, 600 BWPD, CP 2054#, FTP 1390#, CK 20/64", LP 139#, 24 HRS
3/21/2011	7:00 -			33	A			7 AM FLBK REPORT: CP 1850#, TP 1275#, 20/64" CK, 20 BWPH, LIGHT SAND, - GAS TTL BBLS RECOVERED: 4470 BBLS LEFT TO RECOVER: 4291
3/22/2011	7:00 -			33	A			7 AM FLBK REPORT: CP 1725#, TP 1200#, 20/64" CK, 20 BWPH, TRACE SAND, - GAS TTL BBLS RECOVERED: 4950 BBLS LEFT TO RECOVER: 3811



## **END OF WELL REPORT**

**Prepared For:**

**Kerr McGee Oil & Gas Onshore LP**  
**NBU 1022-10G4CS Pad**  
**NBU 1022-10G4CS**  
**Uintah County, UT**

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- 4. Graphical Job History**
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WELL DETAILS: NBU 1022-10G4CS

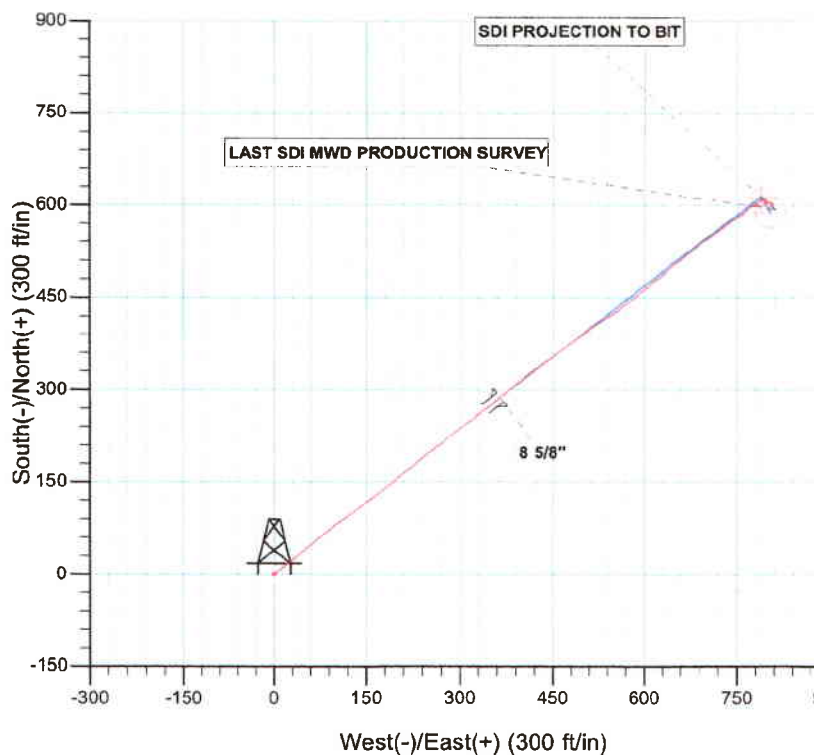
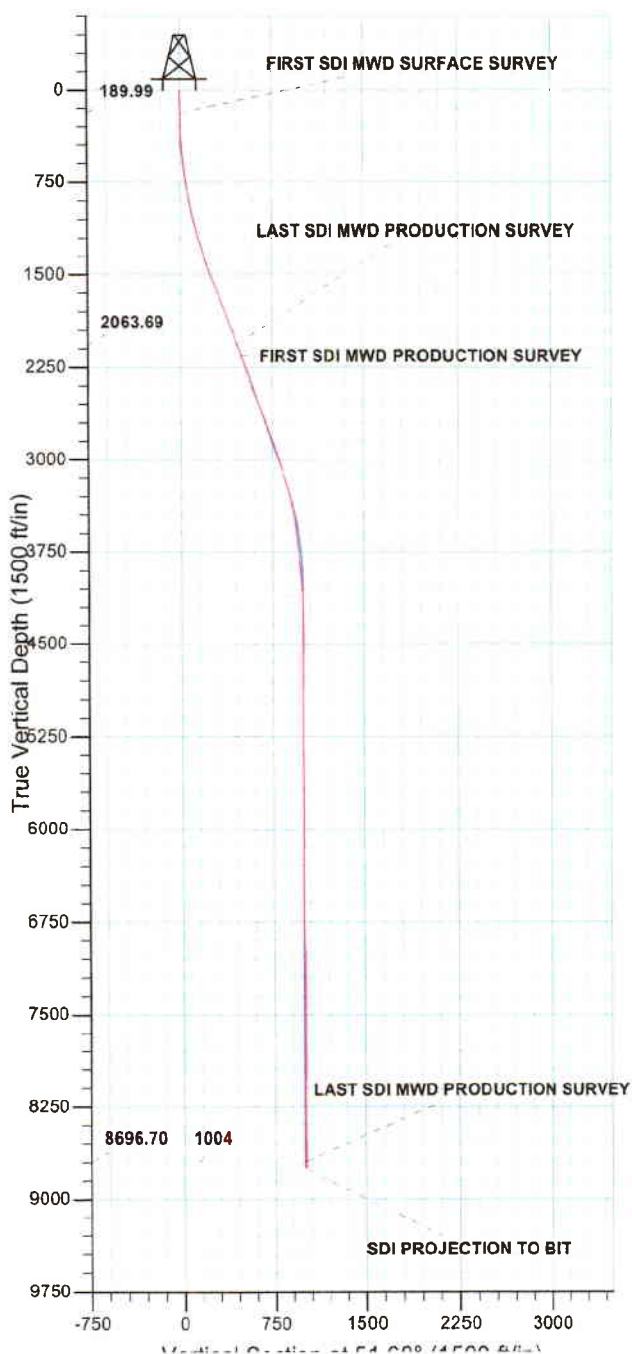
GL 5069 & KB 18' @ 5087.00ft (PIONEER 69)

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	14516148.71	2081677.16	39° 57' 43.657 N	109° 25' 31.089 W



Azimuths to True North  
Magnetic North: 11.09°

Magnetic Field  
Strength: 52354.0snT  
Dip Angle: 65.86°  
Date: 02/03/2011  
Model: IGRF2010



PROJECT DETAILS: Uintah County, UT UTM12

Geodetic System: Universal Transverse Mercator (US Survey Feet)  
Datum: NAD 1927 - Western US  
Ellipsoid: Clarke 1866  
Zone: Zone 12N (114 W to 108 W)  
Location: SECTION 10 T10S R22E  
System Datum: Mean Sea Level

Design: OH (NBU 1022-10G4CS/OH)

Printed On: 02/03/2011 10:00 AM



# **Kerr McGee Oil and Gas Onshore LP**

**Uintah County, UT UTM12**

**NBU 1022-10G4CS**

**NBU 1022-10G4CS**

**OH**

**Design: OH**

## **Standard Survey Report**

**01 March, 2011**



**Company:** Kerr McGee Oil and Gas Onshore LP  
**Project:** Uintah County, UT UTM12  
**Site:** NBU 1022-10G4CS  
**Well:** NBU 1022-10G4CS  
**Wellbore:** OH  
**Design:** OH

**Local Co-ordinate Reference:** Well NBU 1022-10G4CS  
**TVD Reference:** GL 5069 & KB 18' @ 5087.00ft (PIONEER 69)  
**MD Reference:** GL 5069 & KB 18' @ 5087.00ft (PIONEER 69)  
**North Reference:** True  
**Survey Calculation Method:** Minimum Curvature  
**Database:** EDM5000-RobertS-Local

<b>Project</b>	Uintah County, UT UTM12		
<b>Map System:</b>	Universal Transverse Mercator (US Survey Feet)	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	NAD 1927 - Western US		
<b>Map Zone:</b>	Zone 12N (114 W to 108 W)		

<b>Site</b>	NBU 1022-10G4CS, SECTION 10 T10S R22E				
<b>Site Position:</b>		<b>Northing:</b>	14,516,148.71 usft	<b>Latitude:</b>	39° 57' 43.657 N
<b>From:</b>	Lat/Long	<b>Easting:</b>	2,081,677.15 usft	<b>Longitude:</b>	109° 25' 31.089 W
<b>Position Uncertainty:</b>	0.00 ft	<b>Slot Radius:</b>	13.200 in	<b>Grid Convergence:</b>	1.01 °

Well	NBU 1022-10G4CS, 2136 FSL 2620 FEL					
Well Position	+N/-S	0.00 ft	Northing:	14,516,148.71 usft	Latitude:	39° 57' 43.657 N
	+E/-W	0.00 ft	Easting:	2,081,677.15 usft	Longitude:	109° 25' 31.089 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level:	5,069.00 ft

<b>Wellbore</b>	OH				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2010	02/03/2011	11.08	65.86	52,354

<b>Design</b>	OH				
<b>Audit Notes:</b>					
<b>Version:</b>	1.0	<b>Phase:</b>	ACTUAL	<b>Tie On Depth:</b>	0.00
<b>Vertical Section:</b>	<b>Depth From (TVD) (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>	
	0.00	0.00	0.00	51.68	

<b>Survey Program</b>	<b>Date</b> 03/01/2011				
<b>From (ft)</b>	<b>To (ft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>	
14.00	2,134.00	Survey #1 SDI MWD SURFACE (OH)	MWD SDI	MWD - Standard ver 1.0.1	
2,231.00	8,905.00	Survey #2 SDI MWD PRODUCTION (OH)	MWD SDI	MWD - Standard ver 1.0.1	

<b>Survey</b>									
<b>Measured Depth (ft)</b>	<b>Inclination (°)</b>	<b>Azimuth (°)</b>	<b>Vertical Depth (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Vertical Section (ft)</b>	<b>Dogleg Rate (°/100ft)</b>	<b>Build Rate (°/100ft)</b>	<b>Turn Rate (°/100ft)</b>
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14.00	0.00	0.00	14.00	0.00	0.00	0.00	0.00	0.00	0.00
190.00	1.19	40.91	189.99	1.38	1.20	1.80	0.68	0.68	0.00
<b>FIRST SDI MWD SURFACE SURVEY</b>									
278.00	1.58	54.14	277.96	2.78	2.78	3.91	0.57	0.44	15.03
362.00	2.35	52.57	361.91	4.51	5.08	6.78	0.92	0.92	-1.87
454.00	3.80	52.84	453.78	7.50	9.01	11.72	1.58	1.58	0.29
544.00	5.78	53.82	543.46	11.97	15.05	19.23	2.20	2.20	1.09
634.00	7.47	52.08	632.85	18.24	23.32	29.61	1.89	1.88	-1.93
724.00	8.56	50.51	721.97	26.10	33.11	42.16	1.24	1.21	-1.74

**Company:** Kerr McGee Oil and Gas Onshore LP  
**Project:** Uintah County, UT UTM12  
**Site:** NBU 1022-10G4CS  
**Well:** NBU 1022-10G4CS  
**Wellbore:** OH  
**Design:** OH

**Local Co-ordinate Reference:** Well NBU 1022-10G4CS  
**TVD Reference:** GL 5069 & KB 18' @ 5087.00ft (PIONEER 69)  
**MD Reference:** GL 5069 & KB 18' @ 5087.00ft (PIONEER 69)  
**North Reference:** True  
**Survey Calculation Method:** Minimum Curvature  
**Database:** EDM5000-RobertS-Local

**Survey**

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
814.00	9.71	49.54	810.83	35.28	44.05	56.44	1.29	1.28	-1.08
904.00	10.73	50.68	899.40	45.52	56.31	72.40	1.16	1.13	1.27
994.00	11.99	51.61	987.64	56.63	70.12	90.13	1.41	1.40	1.03
1,084.00	13.77	52.63	1,075.37	68.94	85.96	110.19	1.99	1.98	1.13
1,174.00	15.71	52.84	1,162.40	82.80	104.18	133.08	2.16	2.16	0.23
1,264.00	17.65	54.21	1,248.61	98.14	124.96	158.89	2.20	2.16	1.52
1,354.00	19.03	53.77	1,334.04	114.80	147.87	187.19	1.54	1.53	-0.49
1,444.00	19.07	52.88	1,419.11	132.34	171.43	216.55	0.33	0.04	-0.99
1,534.00	20.94	49.78	1,503.68	151.60	195.43	247.33	2.39	2.08	-3.44
1,624.00	21.52	49.78	1,587.57	172.65	220.32	279.90	0.64	0.64	0.00
1,714.00	20.97	51.48	1,671.45	193.33	245.52	312.50	0.92	-0.61	1.89
1,804.00	21.35	51.13	1,755.39	213.65	270.88	344.99	0.44	0.42	-0.39
1,894.00	21.46	51.90	1,839.18	234.09	296.59	377.84	0.34	0.12	0.86
1,984.00	21.15	51.74	1,923.03	254.30	322.29	410.54	0.35	-0.34	-0.18
2,074.00	20.05	50.69	2,007.27	274.13	346.98	442.20	1.29	-1.22	-1.17
2,134.00	19.73	52.42	2,063.69	286.82	362.96	462.61	1.12	-0.53	2.88
<b>LAST SDI MWD PRODUCTION SURVEY</b>									
2,231.00	18.32	49.89	2,155.39	306.63	387.60	494.22	1.68	-1.45	-2.61
<b>FIRST SDI MWD PRODUCTION SURVEY</b>									
2,326.00	18.61	52.19	2,245.50	325.54	411.00	524.30	0.83	0.31	2.42
2,421.00	18.99	53.99	2,335.44	343.92	435.48	554.90	0.73	0.40	1.89
2,516.00	19.11	53.79	2,425.23	362.19	460.53	585.89	0.14	0.13	-0.21
2,610.00	21.47	54.78	2,513.39	381.21	487.00	618.45	2.54	2.51	1.05
2,705.00	23.73	55.48	2,601.09	402.07	516.95	654.89	2.40	2.38	0.74
2,800.00	22.82	55.56	2,688.36	423.32	547.90	692.34	0.96	-0.96	0.08
2,895.00	21.13	51.28	2,776.46	444.45	576.45	727.85	2.45	-1.78	-4.51
2,990.00	18.95	52.08	2,865.71	464.65	601.99	760.40	2.31	-2.29	0.84
3,084.00	18.13	51.26	2,954.83	483.18	625.43	790.29	0.92	-0.87	-0.87
3,179.00	17.95	51.59	3,045.16	501.52	648.43	819.71	0.22	-0.19	0.35
3,274.00	16.36	49.68	3,135.93	519.28	670.11	847.72	1.78	-1.67	-2.01
3,369.00	15.24	53.62	3,227.34	535.34	690.36	873.57	1.63	-1.18	4.15
3,464.00	13.44	53.66	3,319.38	549.29	709.31	897.09	1.89	-1.89	0.04
3,559.00	11.43	51.71	3,412.14	561.67	725.59	917.53	2.16	-2.12	-2.05
3,654.00	9.06	53.40	3,505.62	571.96	738.99	934.43	2.51	-2.49	1.78
3,749.00	6.60	59.25	3,599.73	579.21	749.69	947.32	2.72	-2.59	6.16
3,844.00	5.90	47.24	3,694.17	585.32	757.96	957.60	1.56	-0.74	-12.64
3,939.00	7.19	47.97	3,788.55	592.61	765.96	968.40	1.36	1.36	0.77
4,034.00	6.18	62.27	3,882.91	598.97	774.91	979.36	2.04	-1.06	15.05
4,129.00	4.51	53.14	3,977.49	603.59	782.42	988.12	1.97	-1.76	-9.61
4,224.00	3.22	59.83	4,072.28	607.18	787.72	994.49	1.44	-1.36	7.04
4,319.00	1.12	66.28	4,167.20	608.89	790.88	998.03	2.22	-2.21	6.79
4,413.00	0.97	75.68	4,261.19	609.46	792.49	999.65	0.24	-0.16	10.00
4,508.00	1.06	73.92	4,356.17	609.90	794.11	1,001.20	0.10	0.09	-1.85

**Company:** Kerr McGee Oil and Gas Onshore LP  
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**Site:** NBU 1022-10G4CS  
**Well:** NBU 1022-10G4CS  
**Wellbore:** OH  
**Design:** OH

**Local Co-ordinate Reference:** Well NBU 1022-10G4CS  
**TVD Reference:** GL 5069 & KB 18' @ 5087.00ft (PIONEER 69)  
**MD Reference:** GL 5069 & KB 18' @ 5087.00ft (PIONEER 69)  
**North Reference:** True  
**Survey Calculation Method:** Minimum Curvature  
**Database:** EDM5000-RobertS-Local

**Survey**

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
4,603.00	0.88	95.54	4,451.16	610.07	795.68	1,002.54	0.43	-0.19	22.76
4,697.00	1.14	160.93	4,545.15	609.12	796.71	1,002.75	1.18	0.28	69.56
4,792.00	1.14	153.20	4,640.13	607.38	797.44	1,002.25	0.16	0.00	-8.14
4,887.00	1.58	147.40	4,735.10	605.44	798.57	1,001.93	0.48	0.46	-6.11
4,982.00	1.23	253.22	4,830.08	604.04	798.30	1,000.85	2.37	-0.37	111.39
5,077.00	0.88	227.29	4,925.07	603.25	796.79	999.18	0.61	-0.37	-27.29
5,172.00	0.62	257.97	5,020.06	602.65	795.75	997.99	0.49	-0.27	32.29
5,267.00	0.35	228.35	5,115.06	602.35	795.03	997.24	0.38	-0.28	-31.18
5,362.00	0.53	195.83	5,210.05	601.73	794.69	996.59	0.32	0.19	-34.23
5,456.00	0.79	17.94	5,304.05	601.93	794.78	996.78	1.40	0.28	-189.24
5,551.00	0.70	16.71	5,399.04	603.11	795.14	997.80	0.10	-0.09	-1.29
5,646.00	0.26	94.58	5,494.04	603.65	795.53	998.43	0.73	-0.46	81.97
5,741.00	0.44	126.04	5,589.04	603.41	796.04	998.69	0.27	0.19	33.12
5,836.00	1.14	340.23	5,684.03	604.09	796.01	999.09	1.60	0.74	-153.48
5,930.00	0.88	346.03	5,778.02	605.67	795.52	999.68	0.30	-0.28	6.17
6,025.00	0.70	335.92	5,873.01	606.91	795.11	1,000.13	0.24	-0.19	-10.64
6,120.00	0.62	353.41	5,968.00	607.95	794.81	1,000.54	0.23	-0.08	18.41
6,215.00	0.70	160.14	6,063.00	607.91	794.95	1,000.63	1.38	0.08	175.51
6,309.00	0.53	143.53	6,157.00	607.02	795.40	1,000.43	0.26	-0.18	-17.67
6,405.00	0.53	187.13	6,252.99	606.23	795.61	1,000.10	0.41	0.00	45.42
6,500.00	0.62	162.08	6,347.99	605.30	795.72	999.61	0.28	0.09	-26.37
6,594.00	0.44	147.66	6,441.98	604.51	796.07	999.39	0.24	-0.19	-15.34
6,689.00	0.70	130.96	6,536.98	603.82	796.70	999.46	0.32	0.27	-17.58
6,784.00	0.53	294.26	6,631.98	603.62	796.74	999.37	1.28	-0.18	171.89
6,879.00	0.44	183.96	6,726.98	603.44	796.31	998.92	0.84	-0.09	-116.11
6,974.00	1.23	76.38	6,821.97	603.32	797.28	999.60	1.50	0.83	-113.24
7,069.00	1.49	80.69	6,916.94	603.76	799.49	1,001.61	0.29	0.27	4.54
7,163.00	1.49	79.57	7,010.91	604.18	801.89	1,003.76	0.03	0.00	-1.19
7,256.00	1.67	92.82	7,103.87	604.33	804.44	1,005.85	0.44	0.19	14.25
7,353.00	0.88	124.55	7,200.85	603.84	806.46	1,007.13	1.06	-0.81	32.71
7,448.00	0.79	138.35	7,295.84	602.93	807.50	1,007.38	0.23	-0.09	14.53
7,542.00	0.70	150.04	7,389.83	601.95	808.22	1,007.34	0.19	-0.10	12.44
7,637.00	0.26	283.28	7,484.83	601.50	808.30	1,007.12	0.95	-0.46	140.25
7,732.00	0.88	325.47	7,579.83	602.15	807.67	1,007.03	0.75	0.65	44.41
7,827.00	0.88	321.33	7,674.81	603.32	806.80	1,007.08	0.07	0.00	-4.36
7,922.00	0.62	275.81	7,769.81	603.94	805.84	1,006.70	0.66	-0.27	-47.92
8,016.00	0.35	211.91	7,863.80	603.75	805.18	1,006.07	0.60	-0.29	-67.98
8,111.00	0.44	203.30	7,958.80	603.17	804.88	1,005.47	0.11	0.09	-9.06
8,206.00	0.79	181.15	8,053.80	602.18	804.72	1,004.74	0.44	0.37	-23.32
8,301.00	0.62	174.47	8,148.79	601.01	804.76	1,004.04	0.20	-0.18	-7.03
8,396.00	0.70	159.53	8,243.78	599.96	805.01	1,003.59	0.20	0.08	-15.73
8,491.00	0.97	144.41	8,338.77	598.76	805.68	1,003.37	0.36	0.28	-15.92
8,586.00	0.97	152.94	8,433.76	597.39	806.52	1,003.17	0.15	0.00	8.98
8,775.00	1.32	123.05	8,622.72	594.78	809.07	1,003.56	0.36	0.19	-15.81

**Company:** Kerr McGee Oil and Gas Onshore LP  
**Project:** Uintah County, UT UTM12  
**Site:** NBU 1022-10G4CS  
**Well:** NBU 1022-10G4CS  
**Wellbore:** OH  
**Design:** OH

**Local Co-ordinate Reference:** Well NBU 1022-10G4CS  
**TVD Reference:** GL 5069 & KB 18' @ 5087.00ft (PIONEER 69)  
**MD Reference:** GL 5069 & KB 18' @ 5087.00ft (PIONEER 69)  
**North Reference:** True  
**Survey Calculation Method:** Minimum Curvature  
**Database:** EDM5000-RobertS-Local

**Survey**

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
8,849.00	1.67	115.06	8,696.70	593.85	810.76	1,004.31	0.55	0.47	-10.80
<b>LAST SDI MWD PRODUCTION SURVEY</b>									
8,905.00	1.67	115.06	8,752.67	593.16	812.24	1,005.04	0.00	0.00	0.00
<b>SDI PROJECTION TO BIT</b>									

**Design Annotations**

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
190.00	189.99	1.38	1.20	FIRST SDI MWD SURFACE SURVEY
2,134.00	2,063.69	286.82	362.96	LAST SDI MWD PRODUCTION SURVEY
2,231.00	2,155.39	306.63	387.60	FIRST SDI MWD PRODUCTION SURVEY
8,849.00	8,696.70	593.85	810.76	LAST SDI MWD PRODUCTION SURVEY
8,905.00	8,752.67	593.16	812.24	SDI PROJECTION TO BIT

Checked By: \_\_\_\_\_ Approved By: \_\_\_\_\_ Date: \_\_\_\_\_



# **Kerr McGee Oil and Gas Onshore LP**

Uintah County, UT UTM12

NBU 1022-10G4CS

NBU 1022-10G4CS

OH

Design: OH

## **Survey Report - Geographic**

01 March, 2011



**Company:** Kerr McGee Oil and Gas Onshore LP  
**Project:** Uintah County, UT UTM12  
**Site:** NBU 1022-10G4CS  
**Well:** NBU 1022-10G4CS  
**Wellbore:** OH  
**Design:** OH

**Local Co-ordinate Reference:** Well NBU 1022-10G4CS  
**TVD Reference:** GL 5069 & KB 18' @ 5087.00ft (PIONEER 69)  
**MD Reference:** GL 5069 & KB 18' @ 5087.00ft (PIONEER 69)  
**North Reference:** True  
**Survey Calculation Method:** Minimum Curvature  
**Database:** EDM5000-RobertS-Local

<b>Project</b>	Uintah County, UT UTM12		
<b>Map System:</b>	Universal Transverse Mercator (US Survey Feet)	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	NAD 1927 - Western US		
<b>Map Zone:</b>	Zone 12N (114 W to 108 W)		

<b>Site</b>	NBU 1022-10G4CS, SECTION 10 T10S R22E			
<b>Site Position:</b>		<b>Northing:</b>	14,516,148.71 usft	<b>Latitude:</b> 39° 57' 43.657 N
<b>From:</b>	Lat/Long	<b>Easting:</b>	2,081,677.15 usft	<b>Longitude:</b> 109° 25' 31.089 W
<b>Position Uncertainty:</b>	0.00 ft	<b>Slot Radius:</b>	13.200 in	<b>Grid Convergence:</b> 1.01 °

<b>Well</b>	NBU 1022-10G4CS, 2136 FSL 2620 FEL			
<b>Well Position</b>	+N/-S 0.00 ft	<b>Northing:</b>	14,516,148.71 usft	<b>Latitude:</b> 39° 57' 43.657 N
	+E/-W 0.00 ft	<b>Easting:</b>	2,081,677.15 usft	<b>Longitude:</b> 109° 25' 31.089 W
<b>Position Uncertainty</b>	0.00 ft	<b>Wellhead Elevation:</b>	ft	<b>Ground Level:</b> 5,069.00 ft

<b>Wellbore</b>	OH				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2010	02/03/2011	11.08	65.86	52,354

<b>Design</b>	OH				
<b>Audit Notes:</b>					
<b>Version:</b>	1.0	<b>Phase:</b>	ACTUAL	<b>Tie On Depth:</b>	0.00
<b>Vertical Section:</b>	<b>Depth From (TVD) (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>	
	0.00	0.00	0.00	51.68	

<b>Survey Program</b>	<b>Date</b> 03/01/2011				
<b>From (ft)</b>	<b>To (ft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>	
14.00	2,134.00	Survey #1 SDI MWD SURFACE (OH)	MWD SDI	MWD - Standard ver 1.0.1	
2,231.00	8,905.00	Survey #2 SDI MWD PRODUCTION (OH)	MWD SDI	MWD - Standard ver 1.0.1	

<b>Survey</b>									
<b>Measured Depth (ft)</b>	<b>Inclination (°)</b>	<b>Azimuth (°)</b>	<b>Vertical Depth (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Map Northing (usft)</b>	<b>Map Easting (usft)</b>	<b>Latitude</b>	<b>Longitude</b>
0.00	0.00	0.00	0.00	0.00	0.00	14,516,148.71	2,081,677.15	39° 57' 43.657 N	109° 25' 31.089 W
14.00	0.00	0.00	14.00	0.00	0.00	14,516,148.71	2,081,677.15	39° 57' 43.657 N	109° 25' 31.089 W
190.00	1.19	40.91	189.99	1.38	1.20	14,516,150.12	2,081,678.32	39° 57' 43.671 N	109° 25' 31.074 W
<b>FIRST SDI MWD SURFACE SURVEY</b>									
278.00	1.58	54.14	277.96	2.78	2.78	14,516,151.54	2,081,679.88	39° 57' 43.685 N	109° 25' 31.053 W
362.00	2.35	52.57	361.91	4.51	5.08	14,516,153.31	2,081,682.16	39° 57' 43.702 N	109° 25' 31.024 W
454.00	3.80	52.84	453.78	7.50	9.01	14,516,156.37	2,081,686.03	39° 57' 43.731 N	109° 25' 30.973 W
544.00	5.78	53.82	543.46	11.97	15.05	14,516,160.95	2,081,691.99	39° 57' 43.775 N	109° 25' 30.896 W
634.00	7.47	52.08	632.85	18.24	23.32	14,516,167.37	2,081,700.15	39° 57' 43.837 N	109° 25' 30.789 W
724.00	8.56	50.51	721.97	26.10	33.11	14,516,175.39	2,081,709.79	39° 57' 43.915 N	109° 25' 30.664 W
814.00	9.71	49.54	810.83	35.28	44.05	14,516,184.77	2,081,720.57	39° 57' 44.006 N	109° 25' 30.523 W

**Company:** Kerr McGee Oil and Gas Onshore LP  
**Project:** Uintah County, UT UTM12  
**Site:** NBU 1022-10G4CS  
**Well:** NBU 1022-10G4CS  
**Wellbore:** OH  
**Design:** OH

**Local Co-ordinate Reference:** Well NBU 1022-10G4CS  
**TVD Reference:** GL 5069 & KB 18' @ 5087.00ft (PIONEER 69)  
**MD Reference:** GL 5069 & KB 18' @ 5087.00ft (PIONEER 69)  
**North Reference:** True  
**Survey Calculation Method:** Minimum Curvature  
**Database:** EDM5000-RobertS-Local

**Survey**

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
904.00	10.73	50.68	899.40	45.52	56.31	14,516,195.22	2,081,732.65	39° 57' 44.107 N	109° 25' 30.366 W
994.00	11.99	51.61	987.64	56.63	70.12	14,516,206.58	2,081,746.26	39° 57' 44.217 N	109° 25' 30.188 W
1,084.00	13.77	52.63	1,075.37	68.94	85.96	14,516,219.16	2,081,761.88	39° 57' 44.338 N	109° 25' 29.985 W
1,174.00	15.71	52.84	1,162.40	82.80	104.18	14,516,233.34	2,081,779.86	39° 57' 44.475 N	109° 25' 29.751 W
1,264.00	17.65	54.21	1,248.61	98.14	124.96	14,516,249.05	2,081,800.36	39° 57' 44.627 N	109° 25' 29.484 W
1,354.00	19.03	53.77	1,334.04	114.80	147.87	14,516,266.10	2,081,822.97	39° 57' 44.792 N	109° 25' 29.190 W
1,444.00	19.07	52.88	1,419.11	132.34	171.43	14,516,284.06	2,081,846.21	39° 57' 44.965 N	109° 25' 28.887 W
1,534.00	20.94	49.78	1,503.68	151.60	195.43	14,516,303.74	2,081,869.88	39° 57' 45.155 N	109° 25' 28.579 W
1,624.00	21.52	49.78	1,587.57	172.65	220.32	14,516,325.22	2,081,894.39	39° 57' 45.363 N	109° 25' 28.259 W
1,714.00	20.97	51.48	1,671.45	193.33	245.52	14,516,346.35	2,081,919.22	39° 57' 45.568 N	109° 25' 27.935 W
1,804.00	21.35	51.13	1,755.39	213.65	270.88	14,516,367.11	2,081,944.22	39° 57' 45.769 N	109° 25' 27.610 W
1,894.00	21.46	51.90	1,839.18	234.09	296.59	14,516,388.00	2,081,969.56	39° 57' 45.971 N	109° 25' 27.279 W
1,984.00	21.15	51.74	1,923.03	254.30	322.29	14,516,408.66	2,081,994.91	39° 57' 46.171 N	109° 25' 26.949 W
2,074.00	20.05	50.69	2,007.27	274.13	346.98	14,516,428.92	2,082,019.24	39° 57' 46.367 N	109° 25' 26.632 W
2,134.00	19.73	52.42	2,063.69	286.82	362.96	14,516,441.89	2,082,035.00	39° 57' 46.492 N	109° 25' 26.427 W
<b>LAST SDI MWD PRODUCTION SURVEY</b>									
2,231.00	18.32	49.89	2,155.39	306.63	387.60	14,516,462.13	2,082,059.28	39° 57' 46.688 N	109° 25' 26.110 W
<b>FIRST SDI MWD PRODUCTION SURVEY</b>									
2,326.00	18.61	52.19	2,245.50	325.54	411.00	14,516,481.46	2,082,082.34	39° 57' 46.875 N	109° 25' 25.810 W
2,421.00	18.99	53.99	2,335.44	343.92	435.48	14,516,500.27	2,082,106.49	39° 57' 47.056 N	109° 25' 25.495 W
2,516.00	19.11	53.79	2,425.23	362.19	460.53	14,516,518.98	2,082,131.21	39° 57' 47.237 N	109° 25' 25.174 W
2,610.00	21.47	54.78	2,513.39	381.21	487.00	14,516,538.46	2,082,157.34	39° 57' 47.425 N	109° 25' 24.834 W
2,705.00	23.73	55.48	2,601.09	402.07	516.95	14,516,559.85	2,082,186.93	39° 57' 47.631 N	109° 25' 24.449 W
2,800.00	22.82	55.56	2,688.36	423.32	547.90	14,516,581.64	2,082,217.49	39° 57' 47.841 N	109° 25' 24.051 W
2,895.00	21.13	51.28	2,776.46	444.45	576.45	14,516,603.27	2,082,245.67	39° 57' 48.050 N	109° 25' 23.685 W
2,990.00	18.95	52.08	2,865.71	464.65	601.99	14,516,623.91	2,082,270.84	39° 57' 48.250 N	109° 25' 23.357 W
3,084.00	18.13	51.26	2,954.83	483.18	625.43	14,516,642.86	2,082,293.96	39° 57' 48.433 N	109° 25' 23.055 W
3,179.00	17.95	51.59	3,045.16	501.52	648.43	14,516,661.60	2,082,316.63	39° 57' 48.614 N	109° 25' 22.760 W
3,274.00	16.36	49.68	3,135.93	519.28	670.11	14,516,679.74	2,082,337.99	39° 57' 48.790 N	109° 25' 22.482 W
3,369.00	15.24	53.62	3,227.34	535.34	690.36	14,516,696.16	2,082,357.95	39° 57' 48.948 N	109° 25' 22.221 W
3,464.00	13.44	53.66	3,319.38	549.29	709.31	14,516,710.44	2,082,376.65	39° 57' 49.086 N	109° 25' 21.978 W
3,559.00	11.43	51.71	3,412.14	561.67	725.59	14,516,723.10	2,082,392.71	39° 57' 49.209 N	109° 25' 21.769 W
3,654.00	9.06	53.40	3,505.62	571.96	738.99	14,516,733.63	2,082,405.93	39° 57' 49.310 N	109° 25' 21.597 W
3,749.00	6.60	59.25	3,599.73	579.21	749.69	14,516,741.07	2,082,416.49	39° 57' 49.382 N	109° 25' 21.459 W
3,844.00	5.90	47.24	3,694.17	585.32	757.96	14,516,747.32	2,082,424.66	39° 57' 49.442 N	109° 25' 21.353 W
3,939.00	7.19	47.97	3,788.55	592.61	765.96	14,516,754.76	2,082,432.53	39° 57' 49.514 N	109° 25' 21.250 W
4,034.00	6.18	62.27	3,882.91	598.97	774.91	14,516,761.27	2,082,441.36	39° 57' 49.577 N	109° 25' 21.135 W
4,129.00	4.51	53.14	3,977.49	603.59	782.42	14,516,766.03	2,082,448.80	39° 57' 49.623 N	109° 25' 21.039 W
4,224.00	3.22	59.83	4,072.28	607.18	787.72	14,516,769.70	2,082,454.03	39° 57' 49.658 N	109° 25' 20.971 W
4,319.00	1.12	66.28	4,167.20	608.89	790.88	14,516,771.47	2,082,457.15	39° 57' 49.675 N	109° 25' 20.930 W
4,413.00	0.97	75.68	4,261.19	609.46	792.49	14,516,772.07	2,082,458.76	39° 57' 49.681 N	109° 25' 20.910 W
4,508.00	1.06	73.92	4,356.17	609.90	794.11	14,516,772.54	2,082,460.37	39° 57' 49.685 N	109° 25' 20.889 W
4,603.00	0.88	95.54	4,451.16	610.07	795.68	14,516,772.74	2,082,461.94	39° 57' 49.687 N	109° 25' 20.869 W
4,697.00	1.14	160.93	4,545.15	609.12	796.71	14,516,771.80	2,082,462.98	39° 57' 49.678 N	109° 25' 20.855 W
4,792.00	1.14	153.20	4,640.13	607.38	797.44	14,516,770.08	2,082,463.74	39° 57' 49.660 N	109° 25' 20.846 W
4,887.00	1.58	147.40	4,735.10	605.44	798.57	14,516,768.15	2,082,464.91	39° 57' 49.641 N	109° 25' 20.832 W
4,982.00	1.23	253.22	4,830.08	604.04	798.30	14,516,766.75	2,082,464.66	39° 57' 49.627 N	109° 25' 20.835 W
5,077.00	0.88	227.29	4,925.07	603.25	796.79	14,516,765.93	2,082,463.17	39° 57' 49.620 N	109° 25' 20.854 W
5,172.00	0.62	257.97	5,020.06	602.65	795.75	14,516,765.31	2,082,462.14	39° 57' 49.614 N	109° 25' 20.868 W
5,267.00	0.35	228.35	5,115.06	602.35	795.03	14,516,765.00	2,082,461.42	39° 57' 49.611 N	109° 25' 20.877 W
5,362.00	0.53	195.83	5,210.05	601.73	794.69	14,516,764.38	2,082,461.10	39° 57' 49.605 N	109° 25' 20.881 W
5,456.00	0.79	17.94	5,304.05	601.93	794.78	14,516,764.58	2,082,461.18	39° 57' 49.607 N	109° 25' 20.880 W
5,551.00	0.70	16.71	5,399.04	603.11	795.14	14,516,765.76	2,082,461.52	39° 57' 49.618 N	109° 25' 20.876 W
5,646.00	0.26	94.58	5,494.04	603.65	795.53	14,516,766.31	2,082,461.90	39° 57' 49.624 N	109° 25' 20.871 W
5,741.00	0.44	126.04	5,589.04	603.41	796.04	14,516,766.09	2,082,462.41	39° 57' 49.621 N	109° 25' 20.864 W

Company: Kerr McGee Oil and Gas Onshore LP  
Project: Uintah County, UT UTM12  
Site: NBU 1022-10G4CS  
Well: NBU 1022-10G4CS  
Wellbore: OH  
Design: OH

Local Co-ordinate Reference: Well NBU 1022-10G4CS  
TVD Reference: GL 5069 & KB 18' @ 5087.00ft (PIONEER 69)  
MD Reference: GL 5069 & KB 18' @ 5087.00ft (PIONEER 69)  
North Reference: True  
Survey Calculation Method: Minimum Curvature  
Database: EDM5000-RobertS-Local

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
5,836.00	1.14	340.23	5,684.03	604.09	796.01	14,516,766.76	2,082,462.37	39° 57' 49.628 N	109° 25' 20.864 W
5,930.00	0.88	346.03	5,778.02	605.67	795.52	14,516,768.33	2,082,461.85	39° 57' 49.644 N	109° 25' 20.871 W
6,025.00	0.70	335.92	5,873.01	606.91	795.11	14,516,769.56	2,082,461.42	39° 57' 49.656 N	109° 25' 20.876 W
6,120.00	0.62	353.41	5,968.00	607.95	794.81	14,516,770.60	2,082,461.11	39° 57' 49.666 N	109° 25' 20.880 W
6,215.00	0.70	160.14	6,063.00	607.91	794.95	14,516,770.56	2,082,461.24	39° 57' 49.666 N	109° 25' 20.878 W
6,309.00	0.53	143.53	6,157.00	607.02	795.40	14,516,769.68	2,082,461.71	39° 57' 49.657 N	109° 25' 20.872 W
6,405.00	0.53	187.13	6,252.99	606.23	795.61	14,516,768.89	2,082,461.94	39° 57' 49.649 N	109° 25' 20.870 W
6,500.00	0.62	162.08	6,347.99	605.30	795.72	14,516,767.97	2,082,462.06	39° 57' 49.640 N	109° 25' 20.868 W
6,594.00	0.44	147.66	6,441.98	604.51	796.07	14,516,767.18	2,082,462.42	39° 57' 49.632 N	109° 25' 20.864 W
6,689.00	0.70	130.96	6,536.98	603.82	796.70	14,516,766.51	2,082,463.06	39° 57' 49.625 N	109° 25' 20.856 W
6,784.00	0.53	294.26	6,631.98	603.62	796.74	14,516,766.31	2,082,463.11	39° 57' 49.623 N	109° 25' 20.855 W
6,879.00	0.44	183.96	6,726.98	603.44	796.31	14,516,766.12	2,082,462.68	39° 57' 49.621 N	109° 25' 20.861 W
6,974.00	1.23	76.38	6,821.97	603.32	797.28	14,516,766.01	2,082,463.65	39° 57' 49.620 N	109° 25' 20.848 W
7,069.00	1.49	80.69	6,916.94	603.76	799.49	14,516,766.49	2,082,465.85	39° 57' 49.625 N	109° 25' 20.820 W
7,163.00	1.49	79.57	7,010.91	604.18	801.89	14,516,766.95	2,082,468.25	39° 57' 49.629 N	109° 25' 20.789 W
7,256.00	1.67	92.82	7,103.87	604.33	804.44	14,516,767.15	2,082,470.79	39° 57' 49.630 N	109° 25' 20.756 W
7,353.00	0.88	124.55	7,200.85	603.84	806.46	14,516,766.69	2,082,472.83	39° 57' 49.625 N	109° 25' 20.730 W
7,448.00	0.79	138.35	7,295.84	602.93	807.50	14,516,765.81	2,082,473.88	39° 57' 49.616 N	109° 25' 20.717 W
7,542.00	0.70	150.04	7,389.83	601.95	808.22	14,516,764.84	2,082,474.61	39° 57' 49.607 N	109° 25' 20.708 W
7,637.00	0.26	283.28	7,484.83	601.50	808.30	14,516,764.39	2,082,474.70	39° 57' 49.602 N	109° 25' 20.707 W
7,732.00	0.88	325.47	7,579.83	602.15	807.67	14,516,765.03	2,082,474.07	39° 57' 49.609 N	109° 25' 20.715 W
7,827.00	0.88	321.33	7,674.81	603.32	806.80	14,516,766.18	2,082,473.18	39° 57' 49.620 N	109° 25' 20.726 W
7,922.00	0.62	275.81	7,769.81	603.94	805.84	14,516,766.78	2,082,472.20	39° 57' 49.626 N	109° 25' 20.738 W
8,016.00	0.35	211.91	7,863.80	603.75	805.18	14,516,766.58	2,082,471.54	39° 57' 49.625 N	109° 25' 20.747 W
8,111.00	0.44	203.30	7,958.80	603.17	804.88	14,516,765.99	2,082,471.26	39° 57' 49.619 N	109° 25' 20.750 W
8,206.00	0.79	181.15	8,053.80	602.18	804.72	14,516,765.00	2,082,471.12	39° 57' 49.609 N	109° 25' 20.753 W
8,301.00	0.62	174.47	8,148.79	601.01	804.76	14,516,763.84	2,082,471.17	39° 57' 49.597 N	109° 25' 20.752 W
8,396.00	0.70	159.53	8,243.78	599.96	805.01	14,516,762.79	2,082,471.44	39° 57' 49.587 N	109° 25' 20.749 W
8,491.00	0.97	144.41	8,338.77	598.76	805.68	14,516,761.60	2,082,472.14	39° 57' 49.575 N	109° 25' 20.740 W
8,586.00	0.97	152.94	8,433.76	597.39	806.52	14,516,760.25	2,082,472.99	39° 57' 49.562 N	109° 25' 20.729 W
8,775.00	1.32	123.05	8,622.72	594.78	809.07	14,516,757.68	2,082,475.59	39° 57' 49.536 N	109° 25' 20.697 W
8,849.00	1.67	115.06	8,696.70	593.85	810.76	14,516,756.79	2,082,477.30	39° 57' 49.527 N	109° 25' 20.675 W
LAST SDI MWD PRODUCTION SURVEY									
8,905.00	1.67	115.06	8,752.67	593.16	812.24	14,516,756.12	2,082,478.79	39° 57' 49.520 N	109° 25' 20.656 W
SDI PROJECTION TO BIT									

Design Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
190.00	189.99	1.38	1.20	FIRST SDI MWD SURFACE SURVEY
2,134.00	2,063.69	286.82	362.96	LAST SDI MWD PRODUCTION SURVEY
2,231.00	2,155.39	306.63	387.60	FIRST SDI MWD PRODUCTION SURVEY
8,849.00	8,696.70	593.85	810.76	LAST SDI MWD PRODUCTION SURVEY
8,905.00	8,752.67	593.16	812.24	SDI PROJECTION TO BIT

Checked By: \_\_\_\_\_ Approved By: \_\_\_\_\_ Date: \_\_\_\_\_

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		<b>FORM 9</b>
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> UTU-025187
<b>1. TYPE OF WELL</b> Gas Well		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>
<b>2. NAME OF OPERATOR:</b> KERR-MCGEE OIL & GAS ONSHORE, L.P.		<b>7. UNIT or CA AGREEMENT NAME:</b> NATURAL BUTTES
<b>3. ADDRESS OF OPERATOR:</b> P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779		<b>8. WELL NAME and NUMBER:</b> NBU 1022-10G4CS
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 2136 FSL 2620 FEL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NWSE Section: 10 Township: 10.0S Range: 22.0E Meridian: S		<b>9. API NUMBER:</b> 43047371680000
<b>PHONE NUMBER:</b> 720 929-6456		<b>9. FIELD and POOL or WILDCAT:</b> NATURAL BUTTES
<b>COUNTY:</b> UINTAH		<b>STATE:</b> UTAH
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA		
<b>TYPE OF SUBMISSION</b>	<b>TYPE OF ACTION</b>	
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE	
<input checked="" type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input type="checkbox"/> ALTER CASING	
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CASING REPAIR	
<input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	
	<input type="checkbox"/> CHANGE TUBING	
	<input type="checkbox"/> CHANGE WELL STATUS	
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	
	<input type="checkbox"/> CONVERT WELL TYPE	
	<input type="checkbox"/> DEEPEN	
	<input type="checkbox"/> FRACTURE TREAT	
	<input type="checkbox"/> NEW CONSTRUCTION	
	<input type="checkbox"/> OPERATOR CHANGE	
	<input type="checkbox"/> PLUG AND ABANDON	
	<input type="checkbox"/> PLUG BACK	
	<input type="checkbox"/> PRODUCTION START OR RESUME	
	<input type="checkbox"/> RECLAMATION OF WELL SITE	
	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION	
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	
	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	
	<input type="checkbox"/> TEMPORARY ABANDON	
	<input type="checkbox"/> TUBING REPAIR	
	<input type="checkbox"/> VENT OR FLARE	
	<input type="checkbox"/> WATER DISPOSAL	
	<input type="checkbox"/> WATER SHUTOFF	
	<input type="checkbox"/> SI TA STATUS EXTENSION	
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	
	<input type="checkbox"/> OTHER: <input style="width: 100px;" type="text"/>	
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.		
Accepted by the Utah Division of Oil, Gas and Mining <b>FOR RECORD ONLY</b> November 29, 2016		
<b>NAME (PLEASE PRINT)</b> Candice Barber	<b>PHONE NUMBER</b> 435 781-9749	<b>TITLE</b> HSE Representative
<b>SIGNATURE</b> N/A	<b>DATE</b> 11/28/2016	

**US ROCKIES REGION**  
**Operation Summary Report**

Well: NBU 1022-10G4CS				Spud Conductor: 2/7/2011				Spud date: 2/11/2011			
Project: UTAH-UINTAH				Site: NBU 1022-10G4CS				Rig name no.: MILES-GRAY 1/1			
Event: WELL WORK EXPENSE				Start date: 11/21/2016				End date: 11/23/2016			
Active datum: RKB @5,085.00usft (above Mean Sea Level)				UWI: NW/SE/0/10/S/22/E/10/0/0/26/PM/S/2136/E/0/2620/0/0							
Date	Time Start-End		Duration (hr)	Phase	Code	Sub Code	P/U	MD from (usft)	Operation		
11/21/2016	7:00	- 7:15	0.25	MAINT	48	B	P		SAFETY = JSA.		
	7:15	- 8:40	1.42	MAINT	30	H	P		RMO NBU 1022-9H1BS.		
	8:40	- 9:10	0.50	MAINT	30	G	P		ROAD RIG TO LOCATION.		
	9:10	- 10:20	1.17	MAINT	30	A	P		MIRU. SPOT IN ALL EQUIP. LAY PUMP LINES ETC.		
	10:20	- 11:40	1.33	MAINT	30	F	P		SICP= 1050#. SITP= 800#. BLOW DOWN WELL TO PRODUCTION TANK. CNTRL TBNG W/ 20BBLS TMAC AND PRESSURED UP @ 700# W/ NO BLEED OFF. CNTRL CSG W/ 20BBLS TMAC. NDWH. UN-LAND TBG (TBG STUCK). STIP IN 2-3/8" P-110 X 6' TBG PUP JT. LAND TBG BACK ON HANGER. FUNCTION TEST BOP GOOD. NUBOP. R/U FLOOR & TBG EQUIP. UN-LAND TBG & RMV HANGER. P/U 1JT OF 2-3/8" P-110 TBNG & BEGIN TO WORK STUCK TBNG.		
	11:40	- 14:45	3.08	MAINT	31		P		WORK STUCK TBNG. TBNG BEGAN TO WORK DOWN HOLE. WORK TBNG DOWN HOLE 17' BUT TBNG STILL STUCK. COULD NOT WORK UP HOLE. CALLED FOR E-LINE WHILE WORKING TBNG.		
	14:45	- 17:00	2.25	MAINT	34	H	P		MIRU WIRELINE. P/U & RIH W/ 4SPF X 1' TBNG PUNCHER. COULD NOT GET DEEP ENOUGH TO PERF TBNG WHERE IT WAS STUCK. STACKED OUT @ 5272'. COULD NOT GET THRU BLOCKAGE. POOH W/ PERF GUN. P/U & RIH W/ 1-1/2" TBNG CUTTER. STACK OUT AGAIN @ 5272'. POOH E-LINE. SDFN. SPEAK W/ SUPERVISION ON PLANS MOVING FORWARD. SWIFN. LOCK RAMS. SDFN.		
11/22/2016	7:00	- 7:15	0.25	MAINT	48	B	P		SAFETY = JSA.		
	7:15	- 8:00	0.75	MAINT	31	B	P		SICP= 400#. SITP= 10#. BLOW DOWN CSNG TO FLOWBACK TANK. BLOW DOWN TBG TO FLAT TANK. CONT WORKING STUCK TBNG WHILE WIRELINE WAS SPOTTING IN & R/U FOR TBNG CUT. TBNG FINALLY BROKE FREE. RDMO E-LINE. DECIDED NOT TO PERF TBNG DUE TO RISK OF GETTING TOOLS STUCK WHILE SHOOTING.		

## US ROCKIES REGION

## Operation Summary Report

Well: NBU 1022-10G4CS		Spud Conductor: 2/7/2011		Spud date: 2/11/2011	
Project: UTAH-UINTAH		Site: NBU 1022-10G4CS			Rig name no.: MILES-GRAY 1/1
Event: WELL WORK EXPENSE		Start date: 11/21/2016		End date: 11/23/2016	
Active datum: RKB @5,085.00usft (above Mean Sea Level)		UWI: NW/SE/0/10/S/22/E/10/0/0/26/PM/S/2136/E/0/2620/0/0			

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD from (usft)	Operation
	8:00 - 13:30	5.50	MAINT	31	S	P		L/D JT OF TBNG THAT WAS P/U TO WORK STUCK PIPE & TBNG PUP JT. MIRU SCANNERS. POOH WHILE SCANNING 223JTS 2-3/8" J-55 TBNG OF THE 247JTS IN THE WELL. TBNG HAD VERY BAD SCALE AND THE SLIPS WERE HAVING TO BE CLEANED ON EVERY JT (SO RDMO SCANNER FOR LAST 24JTS. LAST 24JTS WERE L/D AS RED. L/D ALL TBNG FOR BETTER INSPECTION. SWABBED FLUID OUT OF THE TBNG WHILE POOH TO KEEP FROM PULLING WET. TBNG SCAN RESULTS AS FOLLOWS:  76JTS Y-BND TBNG. JT INTERVAL OF GOOD TBNG WAS JT#1 THRU JT# 177.  171JTS R-BND. JTS #166,#167 & #168 WERE PLUGGED SOLID W/ BROKEN UP PIECES OF SCALE THAT HAD BRIDGED OFF. VERY HEAVY EXTERNAL SCALE FROM JT# 212 THRU REST OF STRING TO JT #247. LIGHT TO MODERATE INTERNAL SCALE FROM JT @202 THRU REST OF STRING TO JT # 240. JT# 245 & 246 WERE PLUGGED SOLID W/ BROKEN UP PIECES OF SCALE. HOLE IN THE TBNG WAS FOUND IN JT# 247 @7805'.
	13:30 - 17:00	3.50	MAINT	31	I	P		P/U & RIH W/ 3-7/8" MILL, POBS, 1.875" XN NIPPLE +129JTS 2-3/8" L-80 Y-BND TBNG. DRAIN EQUIP. SWIFN. LOCK RAMS. SDFN. LEAVE EOT ABOVE PERFS @ 4085'.
11/23/2016	7:00 - 7:15	0.25	MAINT	48	B	P		SAFETY = JSA.
	7:15 - 10:10	2.92	MAINT	31	R	P		SICP= 400#. SITP= 100#. BLOW DOWN CSNG TO FLOWBACK TANK. BLOW DOWN TBNG TO FLAT TANK. CNTRL TBG W/ 10BBLS TMAC. CONT P/U & RIH W/ 3-7/8" MILL, POBS, 1.875" XN & 2-3/8" L-80 Y-BND TBNG. T/U ON SCALE @ 7818' W/ 258JTS TOTAL + BHA. R/U POWER SWIVEL.
	10:10 - 14:00	3.83	MAINT	31	N	P		MIRU N2 FOAM UNIT. BREAK CONV CIRC IN 1HR. C/O PATCHY SCALE FROM 7818' TO 8210'. C/O SAND FROM 8210' TO 8398' W/ TOTAL OF 266JTS TBNG + BHA. BTM PERF @ 8292'. CIRC WELL CLEAN FOR 1HR. BLEED OFF PRESSURE ABOVE TSF. R/D POWER SWIVEL. PUH WHILE L/D 19JTS TBNG TO TSF. CNTRL TBNG W/ 10BBLS TMAC. RMV TSF. DROP BALL AND PUMP OFF BIT W/ 35BBLS TMAC. DID NOT SEE BIT PUMP OFF.
	14:00 - 14:45	0.75	MAINT	31	Y	P		R/U SAND LINE EQUIP. BROACH TBNG GOOD FROM SURFACE TO 1.875" XN @ 7808' W/ DBBL BROACH (1.915" + 1.906"). POOH SAND LINE. R/D SAND LINE.

## US ROCKIES REGION

## Operation Summary Report

Well: NBU 1022-10G4CS		Spud Conductor: 2/7/2011		Spud date: 2/11/2011	
Project: UTAH-UINTAH		Site: NBU 1022-10G4CS			Rig name no.: MILES-GRAY 1/1
Event: WELL WORK EXPENSE		Start date: 11/21/2016		End date: 11/23/2016	
Active datum: RKB @5,085.00usft (above Mean Sea Level)		UWI: NW/SE/0/10/S/22/E/10/0/0/26/PM/S/2136/E/0/2620/0/0			

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD from (usft)	Operation
	14:45 - 17:00	2.25	MAINT	31	I	P		<p>LUBE IN TBNG HANGER. LAND TBNG. R/D FLOOR &amp; TBNG EQUIP. NDBOP. NUWH. R/D RIG. PREP FOR MOVE MONDAY MORNING 11/28/16.</p> <p>R/U N2 FOAM UNIT. BREAK CONV CIRC IN 1HR. UN-LOAD FLUID FROM WELL. PURGE CSNG &amp; TBNG TO FLOWBACK TANK FOR 1HR. SWIFN. SDFN.</p> <p>PRODUCTION TBNG LANDED AS FOLLOWS:</p> <p>K.B.= 18.00'  HANGER= .83'  247JTS 2-3/8" L-80 Y-BND TBNG= 7787.35'  1.875" XN / POBS= 2.20'  EOT @ 7808.38'</p>

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		<b>FORM 9</b>
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> UTU-025187
<b>1. TYPE OF WELL</b> Gas Well		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>
<b>2. NAME OF OPERATOR:</b> KERR-MCGEE OIL & GAS ONSHORE, L.P.		<b>7. UNIT or CA AGREEMENT NAME:</b> NATURAL BUTTES
<b>3. ADDRESS OF OPERATOR:</b> P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779		<b>8. WELL NAME and NUMBER:</b> NBU 1022-10G4CS
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 2136 FSL 2620 FEL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NWSE Section: 10 Township: 10.0S Range: 22.0E Meridian: S		<b>9. API NUMBER:</b> 43047371680000
<b>PHONE NUMBER:</b> 720 929-6454		<b>9. FIELD and POOL or WILDCAT:</b> NATURAL BUTTES
<b>COUNTY:</b> UINTAH		<b>STATE:</b> UTAH
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA		
<b>TYPE OF SUBMISSION</b>	<b>TYPE OF ACTION</b>	
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION	
<input checked="" type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: 11/23/2016	<input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input checked="" type="checkbox"/> OTHER	
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION	
<input type="checkbox"/> DRILLING REPORT Report Date:	OTHER: <input type="text" value="WORKOVER"/>	
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. <div style="display: flex; justify-content: space-between; align-items: flex-start;"> <div style="width: 60%;"> <p style="text-align: center;">A WELLBORE CLEANOUT HAS BEEN COMPLETED ON THE NBU 1022-10G4CS WELL. PLEASE SEE THE ATTACHED OPERATIONS SUMMARY REPORT FOR DETAILS.</p> </div> <div style="width: 35%; text-align: center;"> <p>Accepted by the Utah Division of Oil, Gas and Mining</p> <p><b>FOR RECORD ONLY</b></p> <p>November 30, 2016</p> </div> </div>		
<b>NAME (PLEASE PRINT)</b> Candice Barber		<b>PHONE NUMBER</b> 435 781-9749
<b>SIGNATURE</b> N/A		<b>TITLE</b> HSE Representative
<b>DATE</b> 11/29/2016		

**US ROCKIES REGION**  
**Operation Summary Report**

Well: NBU 1022-10G4CS				Spud Conductor: 2/7/2011				Spud date: 2/11/2011			
Project: UTAH-UINTAH				Site: NBU 1022-10G4CS				Rig name no.: MILES-GRAY 1/1			
Event: WELL WORK EXPENSE				Start date: 11/21/2016				End date: 11/23/2016			
Active datum: RKB @5,085.00usft (above Mean Sea Level)				UWI: NW/SE/0/10/S/22/E/10/0/0/26/PM/S/2136/E/0/2620/0/0							
Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD from (usft)	Operation			
11/21/2016	7:00 - 7:15	0.25	MAINT	48	B	P		SAFETY = JSA.			
	7:15 - 8:40	1.42	MAINT	30	H	P		RMO NBU 1022-9H1BS.			
	8:40 - 9:10	0.50	MAINT	30	G	P		ROAD RIG TO LOCATION.			
	9:10 - 10:20	1.17	MAINT	30	A	P		MIRU. SPOT IN ALL EQUIP. LAY PUMP LINES ETC.			
	10:20 - 11:40	1.33	MAINT	30	F	P		SICP= 1050#. SITP= 800#. BLOW DOWN WELL TO PRODUCTION TANK. CNTRL TBNG W/ 20BBLS TMAC AND PRESSURED UP @ 700# W/ NO BLEED OFF. CNTRL CSG W/ 20BBLS TMAC. NDWH. UN-LAND TBG (TBG STUCK). STIP IN 2-3/8" P-110 X 6' TBG PUP JT. LAND TBG BACK ON HANGER. FUNCTION TEST BOP GOOD. NUBOP. R/U FLOOR & TBG EQUIP. UN-LAND TBG & RMV HANGER. P/U 1JT OF 2-3/8" P-110 TBNG & BEGIN TO WORK STUCK TBNG.			
	11:40 - 14:45	3.08	MAINT	31		P		WORK STUCK TBNG. TBNG BEGAN TO WORK DOWN HOLE. WORK TBNG DOWN HOLE 17' BUT TBNG STILL STUCK. COULD NOT WORK UP HOLE. CALLED FOR E-LINE WHILE WORKING TBNG.			
	14:45 - 17:00	2.25	MAINT	34	H	P		MIRU WIRELINE. P/U & RIH W/ 4SPF X 1' TBNG PUNCHER. COULD NOT GET DEEP ENOUGH TO PERF TBNG WHERE IT WAS STUCK. STACKED OUT @ 5272'. COULD NOT GET THRU BLOCKAGE. POOH W/ PERF GUN. P/U & RIH W/ 1-1/2" TBNG CUTTER. STACK OUT AGAIN @ 5272'. POOH E-LINE. SDFN. SPEAK W/ SUPERVISION ON PLANS MOVING FORWARD. SWIFN. LOCK RAMS. SDFN.			
11/22/2016	7:00 - 7:15	0.25	MAINT	48	B	P		SAFETY = JSA.			
	7:15 - 8:00	0.75	MAINT	31	B	P		SICP= 400#. SITP= 10#. BLOW DOWN CSNG TO FLOWBACK TANK. BLOW DOWN TBG TO FLAT TANK. CONT WORKING STUCK TBNG WHILE WIRELINE WAS SPOTTING IN & R/U FOR TBNG CUT. TBNG FINALLY BROKE FREE. RDMO E-LINE. DECIDED NOT TO PERF TBNG DUE TO RISK OF GETTING TOOLS STUCK WHILE SHOOTING.			

## US ROCKIES REGION

## Operation Summary Report

Well: NBU 1022-10G4CS		Spud Conductor: 2/7/2011		Spud date: 2/11/2011	
Project: UTAH-UINTAH		Site: NBU 1022-10G4CS			Rig name no.: MILES-GRAY 1/1
Event: WELL WORK EXPENSE		Start date: 11/21/2016		End date: 11/23/2016	
Active datum: RKB @5,085.00usft (above Mean Sea Level)		UWI: NW/SE/0/10/S/22/E/10/0/0/26/PM/S/2136/E/0/2620/0/0			

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD from (usft)	Operation
	8:00 - 13:30	5.50	MAINT	31	S	P		L/D JT OF TBNG THAT WAS P/U TO WORK STUCK PIPE & TBNG PUP JT. MIRU SCANNERS. POOH WHILE SCANNING 223JTS 2-3/8" J-55 TBNG OF THE 247JTS IN THE WELL. TBNG HAD VERY BAD SCALE AND THE SLIPS WERE HAVING TO BE CLEANED ON EVERY JT (SO RDMO SCANNER FOR LAST 24JTS. LAST 24JTS WERE L/D AS RED. L/D ALL TBNG FOR BETTER INSPECTION. SWABBED FLUID OUT OF THE TBNG WHILE POOH TO KEEP FROM PULLING WET. TBNG SCAN RESULTS AS FOLLOWS:  76JTS Y-BND TBNG. JT INTERVAL OF GOOD TBNG WAS JT#1 THRU JT# 177.  171JTS R-BND. JTS #166,#167 & #168 WERE PLUGGED SOLID W/ BROKEN UP PIECES OF SCALE THAT HAD BRIDGED OFF. VERY HEAVY EXTERNAL SCALE FROM JT# 212 THRU REST OF STRING TO JT #247. LIGHT TO MODERATE INTERNAL SCALE FROM JT @202 THRU REST OF STRING TO JT #240. JT# 245 & 246 WERE PLUGGED SOLID W/ BROKEN UP PIECES OF SCALE. HOLE IN THE TBNG WAS FOUND IN JT# 247 @7805'.
	13:30 - 17:00	3.50	MAINT	31	I	P		P/U & RIH W/ 3-7/8" MILL, POBS, 1.875" XN NIPPLE +129JTS 2-3/8" L-80 Y-BND TBNG. DRAIN EQUIP. SWIFN. LOCK RAMS. SDFN. LEAVE EOT ABOVE PERFS @ 4085'.
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	10:10 - 14:00	3.83	MAINT	31	N	P		MIRU N2 FOAM UNIT. BREAK CONV CIRC IN 1HR. C/O PATCHY SCALE FROM 7818' TO 8210'. C/O SAND FROM 8210' TO 8398' W/ TOTAL OF 266JTS TBNG + BHA. BTM PERF @ 8292'. CIRC WELL CLEAN FOR 1HR. BLEED OFF PRESSURE ABOVE TSF. R/D POWER SWIVEL. PUH WHILE L/D 19JTS TBNG TO TSF. CNTRL TBNG W/ 10BBLS TMAC. RMV TSF. DROP BALL AND PUMP OFF BIT W/ 35BBLS TMAC. DID NOT SEE BIT PUMP OFF.
	14:00 - 14:45	0.75	MAINT	31	Y	P		R/U SAND LINE EQUIP. BROACH TBNG GOOD FROM SURFACE TO 1.875" XN @ 7808' W/ DBBL BROACH (1.915" + 1.906"). POOH SAND LINE. R/D SAND LINE.

## US ROCKIES REGION

## Operation Summary Report

Well: NBU 1022-10G4CS		Spud Conductor: 2/7/2011		Spud date: 2/11/2011	
Project: UTAH-UINTAH		Site: NBU 1022-10G4CS		Rig name no.: MILES-GRAY 1/1	
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Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD from (usft)	Operation
	14:45 - 17:00	2.25	MAINT	31	I	P		<p>LUBE IN TBNG HANGER. LAND TBNG. R/D FLOOR &amp; TBNG EQUIP. NDBOP. NUWH. R/D RIG. PREP FOR MOVE MONDAY MORNING 11/28/16.</p> <p>R/U N2 FOAM UNIT. BREAK CONV CIRC IN 1HR. UN-LOAD FLUID FROM WELL. PURGE CSNG &amp; TBNG TO FLOWBACK TANK FOR 1HR. SWIFN. SDFN.</p> <p>PRODUCTION TBNG LANDED AS FOLLOWS:</p> <p>K.B.= 18.00'  HANGER= .83'  247JTS 2-3/8" L-80 Y-BND TBNG= 7787.35'  1.875" XN / POBS= 2.20'  EOT @ 7808.38'</p>